Lumleian Lectures
ON THE
ÆTIOLOGY OF PHTHISIS.

Delivered at the Royal College of Physicians,

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LECTURE III.

MR. PRESIDENT AND GENTLEMEN,—It was my intention to have dealt separately with the evidence as to the contagiousness of phthisis, and with its analogy in many respects to malarial fever; but the two diseases from the standpoint of causation are so closely related, each throws so much light upon the other in respect of the question of contagion, that to do so would involve much needless repetition, without adding any force to my argument. From our review of the ætiology of phthisis, it is easy to recognise many points in which the two diseases strikingly resemble each other. I shall begin by stating their chief resemblances dogmatically, and without unnecessarily quoting well-known facts in their support.

Both diseases have been known from the earliest times, and in both the evidence of their having been introduced into any new country by man is very inconclusive. The facts, such as they are, are quite consistent with the view that the first discoverers and colonisers of any new country did not in either case import some specific morbific germ, but found it already there. Both within historical times have prevailed in varying degrees in the same locality. Thus the increase of phthisis in America and in Australia is fairly comparable to that of malarial fever in Italy. In each case a change more or less complete in the race of the inhabitants of the country with, in the first instance an advancing, and in the second a retrograding civilisation, seems to have favoured the spread of the specific disease. Both affections are met with almost everywhere, but phthisis extends somewhat further towards the north than malaria. There is no need to invoke human agency to account for this wide dispersal of either the one or the other. The same fact obtains in the case of many of the lower forms of vegetable life—e.g., the mosses and lichens. Of these latter, several species common in Britain have been found in the Falkland Islands, Graham's Land, Kerguelen's Land, and in other Antarctic islands or continents; on the Himalayas, in Chili, in Equatorial Brazil and South America; in Spitzbergen, Lapland, Iceland, Nova Zembla, and more northern polar islands or continents.[1] In the Transactions of the Linnæan Society of London[2] will also be found a long list, by the Rev. George Henslow, of self-fertilising British plants of world-wide distribution. Both diseases, judging by their effects, vary in their characters to a certain degree in different parts of the world; and their variation, in the case of malaria certainly, in that of phthisis probably, cannot be altogether due to differences in the personal factors; compare, for instance, the greater rapidity of the course of phthisis in the tropics with the greater violence of malarial fevers in the same regions. Both prevail under certain well-known climatic and social conditions, and yet both are here and there unaccountably absent from likely spots and present in unlikely ones. Both decrease in severity and finally disappear with increasing elevation above the sea-level. They are closely connected with dampness of soil, and are greatly diminished, if not extirpated, by efficient drainage. Both are sometimes confined locally within very narrow limits; in malarious countries, for example, the second floor of a house is said to be less dangerous than the first. The action of the micro-organism in each malady is greatly modified by the personal constitution of those exposed to it; thus white races suffer specially from malaria and negroes from phthisis. A bacillus has been demonstrated, cultivated, and proved by inoculation experiments to be the exciting cause of the two diseases (Klebs). They differ in their habitat, phthisis being most prevalent in cities which afford all but complete protection against malaria.

Clinically the diseases agree in the fact that recrudescence takes place after long periods of apparent health. In the case of ague this frequently happens without any fresh exposure to infection, and there is often—e.g., in so-called Roman fever—a well-marked approach to periodicity in its returns even at long intervals. The history of many cases of phthisis makes it probable that the same thing takes place in it too. Again, in both the pyrexia is periodic. Some members of the group of specific febrile diseases, and those, too, of the most common occurrence, are so undoubtedly communicable, either by direct infection, as scarlatina, or by indirect, as typhoid fever, that the idea of contagion dominates the view we take of the entire class, and any disease which has once been placed in it is forthwith regarded as contagious. But it is clear that in different cases the micro-organism which is the exciting cause of the disease stands in very different relations to the living creature which it attacks. Sometimes, as may be the case in typhus or in small-pox, the bacillus may be truly parasitic—i.e., incapable of existing, or at any rate of multiplying, unless it meets with a certain host. Of course, here the disease is directly contagious, and, apart from any question of the origin of species, every case of it is a proof that another case has already existed. Sometimes the bacillus may not be a parasite in so complete a fashion. It may be capable of enormous growth and multiplication in the soil, or in fluids of various kinds, and yet may require, if not for its very existence yet for vigorous growth and for the acquisition of certain properties, to pass from time to time through the body of some host. This is probably the case with the micro-organism of typhoid fever. In both these cases the resulting disease is almost certain to be highly epidemic in character, sometimes causing a vast number of deaths, sometimes almost unknown, or presenting only the mildest type for many years in succession. An instance of this, in the case of a directly infectious disease and of the errors in practice which may arise from forgetfulness of it, is given by Dr. Graves in his twenty-second lecture from the history of scarlatina in Dublin. In the last four months of 1801 and in the spring of 1802 scartalina committed great ravages in Dublin. It ceased in the summer, but returned at intervals during 1803-4, when the disease changed its character. And although scarlatina epidemics recurred very frequently during the next twenty-seven years, yet it was always in the simple and mild form, so that of eighty boys attacked in a public institution not one died. The epidemic of 1801–1804, on the contrary, was extremely fatal, and left many parents childless. The long continuance of the mild type of scarlatina led to the belief that the fatality of the former epidemic was chiefly owing to an erroneous method of treatment, and that bleeding and antiphlogistics would have averted it. "This," he says, "was taught in the schools, and scarlet fever was every day quoted as exhibiting one of the most triumphant examples of the new doctrines. This I myself learned. This I taught; but the experience derived from the present epidemic has completely refuted this reasoning, and has proved that, in spite of our boasted improvements, we have not been more successful in 1834-5 than were our predecessors in 1801–2." The history of the disease, typhoid fever, which I have mentioned as the instance of indirect communicability is essentially one of epidemics—epidemics varying much in type and in extent, but always explicable by some special fouling of food or water. Sometimes, again, the micro-organism may be entirely independent, if not of any host whatever, at any rate of man, its sojourn in his body may be unfavourable to its full development, and it may there cease to bear fruit after its kind. Of course even here transfusion of blood or inoculation with solid tissues or with the products of careful cultivation might propagate the disease; but it would be absurd and mischievous to assert that this proved it to be communicable from the sick to the healthy in any practical sense of these words. This last relation between the germ and the disease it induces, probably holds good in the case of malarial fever, and with this disease all the broad facts ascertained relating to its ætiology, prior to the discovery of the bacillus, prove that phthisis is far more closely allied than with the two former classes of communicable diseases. Is there, then, any reason why the discovery of the bacillus should make us reject the conclusion to which

[1] Popular History of British Lichens, by Lauder Lindsay, p. 97.
[2] Botany, vol. I., p. 321.

the other known facts, with but few exceptions, point? I can see none. That discovery has placed phthisis in the group of specific febrile diseases; a position which it ought to have occupied before the first bacillus was seen; a position which it ought to continue to hold even though the true bacillus should never be seen at all. Of these diseases some are communicable from the sick to the healthy directly, some indirectly, and this as a part of their natural life-history, but some are not communicable at all, except by artificial means, and then with difficulty. There is no *a priori* reason in the nature of things why phthisis should belong to one of these classes rather than to another, or why it should not occupy any conceivable intermediate position among them. It is true that its natural history, as a whole, indicates its affinity with the last-named class; but the question, after all, is one which can be determined only by direct evidence. What, then, are the proofs that phthisis is contagious? No doubt the belief that it is so is an old one, and might be supported by a most respectable array of authorities, easily neutralised by an equally respectable array on the other side. By the regulations of the old hospital of the Knights of St. John at Valetta, embodying the details of the system in use from the foundation of the building in 1575, if not a still older tradition, the beds used by persons suffering from consumption are directed to be burnt, with all the sheets and other things belonging without any reservation. But the force of this is not a little diminished by the circumstance that the beds of persons suffering from other complaints were also to be destroyed. In fact the knights, no doubt very wisely, resolved to be on the safe side in dealing with possible infection. It will be convenient to consider, first, the effect of the success of inoculating animals with the blood, sputum, &c., of tubercular patients, or with the bacillus alone purified as far as possible by successive cultivations, on the question of contagion. It would be waste of time to adduce proof of the trustworthiness of these experiments, still more to raise captious objections against them. There can be no doubt about the matter. They are also a necessary part of the proof that the bacillus, or some similar organism, is the *vera causa* of tubercle, and that consequently phthisis is a specific disease. For the sake of this last truth I could almost, were it necessary, bring myself to admit the truth of the doctrine of a personal contagion. I also fully believe that the inoculation would be successful in men as well as in animals; for, indeed, the thing has been done some years ago. I have not seen the original authority, but quote from the account given by Mr. George Fleming in his well-known article "On the Transmissibility of Tuberculosis," in the *British and Foreign Medico-Chirurgical Review* of Oct. 1874, p. 473.

Experiments conducted by Demet, Paraskeva, and Zallonis, in Syra, Greece, were not only successful in transmitting the disease to rabbits by inoculation with the sputum and blood from a man affected with phthisis, but they ventured upon the unprecedented experiment of inoculating a human patient whose history gave no indication of tuberculous taint, and whose lungs were perfectly healthy so far as a physical examination could discover, but who was suffering from gangrene of the big toe of the left foot, due to obliteration of the femoral artery. Amputation of the limb was proposed by the surgeon, but would not be submitted to; and as a fatal termination was inevitable, a quantity of sputum from a man who had abscesses in his lungs was inoculated in the upper part of the left thigh. About three weeks afterwards auscultation revealed very slightly increased respiratory murmur at the summit of the right lung, and somewhat prolonged expiration in the subclavicular region. In thirty-eight days after inoculation the man died from gangrene, and on examination of the body it was found that the upper lobe of the right lung had seventeen tubercles in the first stage of development, two of which were the size of a lentil, the others being as large as a grain of mustard; they were of a grey colour and very hard. Two similar tubercles existed at the apex of the left lung. At the centre of the convex surface of the liver were two tubercles, one as large as a shelled pea, the other smaller, both being of a yellow colour. From this unusual experiment it is evident that tubercle is inoculable in man himself, for it is scarcely possible that this patient, who was fifty-five years of age, could have had his organs infiltrated with as many as twenty tubercles in the first stage of development only; had they been naturally developed, they must have multiplied and passed through their regular evolution, especially in an individual predisposed to phthisis. Their limited number, stage, and size offered a direct relation to the brief interval separating inoculation from the decease of the patient.

It is to be observed that this unique case lends no support to the idea that the period of incubation in phthisis is a long one, and that consequently the disease may be contracted by exposure to infection two or three years before its first symptoms declare themselves. In this respect the result coincides closely with that of animal inoculations, in which the creatures killed within five weeks after the operation present tubercular growths, which must have begun not less than two or three weeks before death. There is also another point relating to animal inoculation to which it is necessary to call attention. In the course of the numerous experiments carried out by various observers some sixteen to eighteen years ago, it was supposed to have been demonstrated, among others by no less an authority than Dr. Burdon-Sanderson that tuberculosis could be produced in rodents by inserting substances which could not themselves have possessed any specific properties—e.g., setons of unbleached cotton. This is Dr. Sanderson's account of his experiments in this direction, and of the inference to be drawn from them, given in the "Tenth Report of the Medical Officer of the Privy Council for 1867," and which he again affirmed before the Pathological Society in April, 1868:—"It has been found that when animals are inoculated with pus derived from the secondary abscesses of patients affected by pyæmia, death is apt to occur during the third or fourth week after inoculation, in which case the results of dissection are as follows. Abscesses are found at the seat of inoculation, and purulent deposits in the neighbouring subcutaneous tissue; these, although obviously of the same character as those observed after inoculation of tubercle, differ from them in being larger, more numerous, and more generally distributed. The subcutaneous lymphatic glands are healthy, or at most a little enlarged. The internal organs are usually free from disease. When this is not the case, lesions of an obviously inflammatory nature are found; as, for example, pleuro-pneumonia, pericarditis, or subpleural or subperitoneal abscesses. If, on the other hand, the animals survive the primary—i.e., pyæmic—effects of which these lesions are the expression, and are examined several months after inoculation, morbid appearances are found in the lungs, liver, and spleen, in which all the anatomical characters of a tuberculous process are to be recognised. From these facts it is evident that these lesions can no longer be regarded as dependent on any property or action possessed by the inoculated material in virtue of its having been taken from the diseased organs of a phthisical patient. This conclusion is rendered almost certain by the result of the following experiment. On the 29th of October last setons of unbleached cotton were inserted by means of a needle, which had not been used before, in the shoulders of two guinea-pigs, which, from their being entirely white, could be easily distinguished from any of the other animals under observation, all of which happened to have spots of colour. One of these animals was killed on December 28th, and was dissected by Mr. Simon and myself. One of the setons was surrounded by a hard mass of semi-transparent substance, obviously dried-up pus, which was surrounded by connective-tissue induration. The other abscess was of considerable size; the material contained in it was of the consistence of cream-cheese, and, on microscopical examination, the corpuscles of which it consisted were found to have the characters of pus. The internal organs were perfectly healthy. The other animal died on March 15th. There were two open wounds on the left shoulder, each of which led to a sinuous cavity, containing a small quantity of pus, the greater part of the contents of the abscess having escaped externally. Both cavities were connected with each other, and with the neighbouring scapular gland, which was enlarged and softened by subcutaneous bands of induration, and there were numerous purulent deposits in the neighbouring muscles and areolar tissue. The lungs contained very numerous iron-grey nodules. The liver was much enlarged, and presented the characteristic appearances of interstitial adenoid deposit. In the spleen there were numerous miliary nodules. There was enlargement of the agminate glands, both of the large and small intestines, as well as of the lymphatic glands in the gastro-hepatic omentum and mesentery. In this case, therefore, a pathological process, which had originated in traumatic subcutaneous suppuration, resulted in lesions which were characteristically tuberculous."

It is impossible to neglect a deliberate statement like

this, or to put it on one side with the comment that there must have been some fault in the mode of performance of the operation. We have no right to assume that in this and in all other similar experiments with the same result, tuberculous material must have been introduced into the wound. And yet it is almost certain that these same experiments repeated now, with the fuller precautions suggested by a better knowledge of the extreme difficulty of excluding bacilli or their spores, do not give rise to the same specific lesion. The comparison of the two sets of observations, former and recent, with their seemingly contradictory results, calls to mind the difficulty found by Professor Tyndall in preventing the access of certain bacteria to his solutions. The earlier experiments were in some sense failures, although from another point of view they are most valuable as proving the necessity of strict antiseptic precautions, which could scarcely be required if the tubercle bacillus were not generally diffused. It must further be remarked that, notwithstanding the readiness with which tubercle is produced in guinea-pigs by inoculation, and notwithstanding the difficulty of preventing an unpoisoned wound affording an inlet to the disease, the creatures in their natural state are not specially liable to it. Even when kept for physiological purposes, and in the near neighbourhood of the spot where experiments are being carried on, they rarely contract it through the natural channels. Thus in March, 1869, Dr. Wilson Fox exhibited at the Pathological Society some specimens as the first instance which he had observed out of nearly 200 guinea-pigs which had passed under his hands of spontaneous tuberculosis occurring in these animals independent of local injury, adding that in this particular case the disease may have been inherited, for the parents had been inoculated and had both died tuberculous within six months of the inoculation.

The results, then, of direct inoculation justify fully the assertion that phthisis may be communicated artificially; they fall far short of proving that which indeed other evidence disproves, that it is likely to spread through a community by personal intercourse immediate or mediate, after the fashion of scarlatina or of typhoid; whilst the results of the older experiments with indifferent substances point to the probability that the bacillus of tubercle is widely diffused, like that of ague, which can also be successfully inoculated, and that therefore the risk of infection is not perhaps greatly increased by personal contact with the sick. The bacillus malariæ, so far from gaining increased virulence by its sojourn in the human body, must become less dangerous; and looking to the capricious distribution of phthisis and the absence of any sufficient proof that it has been imported into any country, the same may also be the case with the bacillus of tubercle. Anyhow, we require some further, more cogent proof of its being propagated in communities by contagion. Such evidence has been sought for in the results of feeding experiments. Granted that direct inoculation must be a very rare event in common life, the contamination of air, water, and food by sputum or other excreta, containing as they certainly do bacilli, might be at least as frequent an occurrence as it is in the case of scarlatina and typhoid—might indeed be very difficult to prevent. Again, as in inoculation experiments, there is no room to doubt the result of artificial feeding. An animal with whose food bacilli-containing substances are mixed becomes phthisical, if not always, yet so frequently that it would be hypercritical to deny the connexion between the food and the development of the disease. Whilst, however, in an epidemic of scarlatina or typhoid the distribution of the cases and their relation to each other almost always leads the investigator to the primary source of infection, at first unknown, in phthisis, on the contrary, with full knowledge of the foci from which the disease might spread in this way, we fail to discover anything of the kind, except in some very rare instances, and on the smallest scale. In this connexion certain veterinary experiences, rather than experiments, are specially interesting. In the article by Mr. Fleming, already referred to, there is an account by M. Grad, a veterinary surgeon in Alsace, of a most remarkable series of events. A large farmer at Leinheim, five years in succession lost one cow by phthisis, and always in the same stall. A sixth animal, selected for its vigorous health, and the absence of any trace of phthisis in its pedigree, shared the same fate. All the woodwork of the stall was now removed, the manger and rack thoroughly disinfected, and the spot left unoccupied for some time. It was then rebuilt, and reoccupied by several animals in succession, but tuberculosis made no more victims among them, or in any other part of the stable. It is difficult to imagine a stronger case of a virulent contagion, or of one confined for years within such narrow limits; for the stalls were "very short stalls," preventing the animals injuring each other with their horns, but apparently not separating them by the whole length of their bodies. In this case the disease must have been transmitted by some non-volatile substance in the stall itself; otherwise, and if the breath of the tainted animal had been infectious, it is difficult to believe that its neighbours on each side, for six years, could all have escaped unhurt. Indeed, their escape, so far as it proves anything, proves that people of cleanly habits run little or no risk in occupying the same room with a sufferer from consumption, for the cows probably fell victims to their habit of licking the rack and the sides of the stall. But the whole story is so exceptional, that it may have been an instance of local, not of personal infection, and on this theory the extremely narrow area within which so destructive an agent was confined for so many years becomes a little less perplexing. The last and largest collection of observations upon the communicability of phthisis among men, and by far the most important, inasmuch as it includes communications from men of large experience and of every shade of opinion, is that for which we are indebted to the Collective Investigation Committee of the British Medical Association. The report, based by the Committee upon the facts submitted to them, evidently leans to the contagionist side, but the premisses are so faithfully given, that it is easy for anyone to judge for himself how far the conclusion drawn from them is correct. There is, however, one fault in the mode in which the investigation was conducted which must have had considerable influence on the result. In the questions circulated the committee ask for affirmative cases only; notwithstanding this, they received several answers containing cases which appear to disprove the contagiousness of phthisis. The number of these would have doubtless been much larger had they been specially asked for, and in any future inquiry it is to be hoped that this will be done. In consequence, a great number of the returns, 673 out of 1078, were simple negatives, of which the committee could make no further use. The statement that the word "no" means that no case had been observed by the member making the return without any expression of opinion is true to the letter, but not to the intention of some of those who made these returns. Thus a friend told me, with some slight indignation, that his "no" was a very active little word indeed, by which he meant to convey not merely that he had seen no cases of contagion, but that he had noted its absence in cases where, if present, it must have manifested itself. I may add that he is a man who has enjoyed exceptionally large opportunities for studying phthisis. Thus, while the affirmative observers are pretty certainly present in their full proportion of 261 in 1078, the proportion of negative observers is certainly not fully represented by 105. The majority of affirmative observers is unduly magnified; perhaps, even, if negative facts or opinions had been asked for, it might have passed to the other side. The first of the groups into which the affirmative returns are classified is that of cases between husband and wife only. Here, as also in Dr. Hermann Weber's remarkable series of similar cases, the disease most frequently makes its appearance first in the husband. In 188 out of 192 returns under this head, in which it is stated which partner suffered first, in 119 it was the husband, in 69 only the wife. As Dr. Longstaff has pointed out, a certain unascertained number of these cases between married people would occur accidentally—i.e., if there were no such thing as contagion possible, and as these accidental cases would affect both sexes pretty equally in the long run, it follows that in the remainder the difference between the death-rate of the two sexes would be even greater than it appears to be from the full figures. As it is, the disproportion is so great that it requires some explanation. A common remark, containing some truth, is that the woman's natural office of nurse confines her more closely to the sick room, and thus exposes her to more and greater chances of infection than would come upon her husband were she herself the sufferer. For in that case the duty of providing extra comforts for her might even oblige him to work harder than usual at his occupation and to spend less, not more, time in her company. Even on the diathetic theory this would be quite sufficient to explain the greater mortality among the wives. Grief, time spent in anxious tendance and

under most painful conditions, hardships and privations endured that the sick dear one may lack nothing which can be of any service or comfort to him, a life spent almost entirely within doors, and very likely in a close ill-ventilated room—all this would, on the diathetic theory (which, by the way, is perfectly true so long as it is confined to the predisposing causes of phthisis), account in the most natural manner for the excessive mortality on the female side. In point of fact, the personal contagion theory fails signally to explain the facts under this head. For it must be remembered that there is a most important difference between the contagion of phthisis, if it exist, and that of most, if not all, other diseases, and that is its duration. It is not an affair of a few weeks at most, but of months or even years, and during a considerable portion of this time there may be but little change in the domestic life. The husband is still able, if with difficulty, to follow his calling, the wife has no need to undertake the special duties of a nurse. The danger of personal contagion is fairly equal between the two for a very long period, whichever may show the first symptoms of the disease. But there is yet another powerful factor quite distinct from any phthisical contagion properly so-called which turns the scale heavily against the wife. This is syphilis, which undoubtedly in most cases where it exists is transmitted from the husband to the wife. The relation of syphilis to phthisis is by no means simple or uniform, and the number of cases which may be called, more or less truly, syphilitic phthisis is, I believe, very large. Sometimes an affection of the lungs, closely simulating phthisis, which may be seated at the apices, and is frequently attended by repeated and profuse hæmoptysis, is really nothing more than a visceral syphilis, and though powerfully predisposing to, need not be followed by, tubercular phthisis. I have known cases of this kind begin within a few weeks of the appearance of the primary sore, and end in complete recovery when treated as syphilis. In the seventeenth volume of the Pathological Transactions is a valuable drawing from a case of Dr. Hermann Weber's, showing the earliest appearances of the lung affection and its beginning in the lymphatics. If the nature of the illness is not recognised, considerable destruction of lung tissue may take place, and if the bacillus is met with by the patient, tubercular phthisis will follow; but even then the syphilis may continue to form an important factor in the complex morbid process. A few weeks ago a patient was admitted under my care in St. Bartholomew's Hospital for hæmoptysis. There was a history of chest affection, with more than one attack of hæmoptysis, lasting over some two years, and on admission he had marked physical signs of consolidation at both apices, especially, I think, the right. Luckily there was also present in one leg a circular sore of very characteristic appearance. Under the use of perchloride of mercury he rapidly regained flesh and strength, the sore healed, and the physical signs almost entirely vanished. This is not the place to discuss individual cases, but the existence, by no means uncommon, of this form of disease seems to me to give a more reasonable explanation of the undoubted fact that sometimes two or three wives in rapid succession fall victims to phthisis than to be obliged to believe that a contagion ordinarily so mild, as even its advocates represent phthisical contagion to be, should yet exhibit such portentous, fitful activity. The same explanation may perhaps hold good in some other cases of apparent direct infection than those between husband and wife. On the whole, the excess of female mortality in the married cases seems to me to be almost inexplicable on the direct personal contagion theory, simple and natural if we attribute it in part to the presence of a certain number of syphilitic cases, in part to increased predisposition to be affected by a widely diffused exciting cause produced by the special duties of the wife and the indoor nature of her occupations; and to these must further be added the fact that the constitution of the wife soon becomes more or less assimilated to that of her husband, whilst but little, if any, change takes place in his. It is a little remarkable that this exceedingly doubtful class of cases should furnish no less than 192 out of the 261 affirmative observations. In reviewing the remaining groups, notice must be taken of the very small number of instances, especially of those observed between unrelated persons, which amount at most to twenty-one; and this, be it remarked, in the case of a supposed infectious disease, the contagion of which, if it exist at all, is active in the majority of its victims for months or even years. If cases of typhus or of scarlet fever retained their contagious property for an equal period, no human being could escape them. And yet upwards of 1000 observers, speaking from a collective experience of many thousand patients, can only record about a score of cases in which the disease was transmitted between persons unrelated to each other. Contagions which act directly from person to person, and which are probably parasitical in the true sense of the word, are for the most part extremely powerful. They do not recognise slight differences of race, family, climate, subsoil water, or even of altitude above the sea-level. The only protection against them for the unseasoned is to be found in isolation of the sick, the speediest possible destruction of the contagion itself, and in the most perfect ventilation of the sick-room. But phthisis behaves after quite a different fashion. Among persons living together in the same house or in the same room, it picks out special strains of blood, or attacks in one family the males, in another the females only. A widow with eight children, having lost one, came up from the country and occupied a small house at New-cross. One son, who spent but little time there, remained in good health. Of the other seven, two died of phthisis, one in 1872, the other in 1873, and two more became seriously ill with the disease about the same time. These left the house; both gradually recovered, and are still alive. The house was a small one and the family was crowded together, conditions highly favourable for contagion certainly existed. But there were two families, the father having been twice married, leaving five living children by the first wife and three by the second, who survived him. Not one of the latter has suffered from phthisis. The only blot on the family history of the first wife was that a niece had died of consumption. The circumstances made a great impression upon me, and at first I was disposed to look upon it as an instance of contagion, but now my belief is that there was some local influence in the house, something distinct from any personal infection. In the group of affirmative cases observed between persons unrelated only and placed last in the committee's report, containing only the very small number of eight, the following is, perhaps, the most remarkable:—"Miss R., aged forty-eight, a dressmaker, living in rather a lonely cottage in Bedfordshire, had three apprentices, young girls of from seventeen to nineteen years of age, not related, from the adjoining villages, who took it in turn to remain in the house and sleep with her, each for one week at a time. During their apprenticeship Miss R. was taken with phthisis, of which she died. In less than two years afterwards all three apprentices died of phthisis, although, in the family history of each, no trace of phthisis existed and the parents, brothers and sisters of two of them are alive and well at the present time." Here, again, there are curious little difficulties in the way of the explanation by contagion. This must have been most virulent in the case of Miss R., and yet no harm came to any of the friends of her unfortunate apprentices.

Again, I find it difficult to understand how the same contagion can be now and then so destructive as this, and yet for the most part so inert that it is impossible to trace its operation. After all, the number of these extraordinary facts is not greater than might be fairly expected to occur as accidents or coincidences in the case of a disease so common as phthisis. But this is an unsatisfactory mode of regarding them, when in the light of the recognised general law of the distribution of phthisis and of the exceptions to those laws which point to a wide and yet capricious dispersal of its exciting cause they can be so naturally explained as instances of special local infection.

The following quotation from Dr. Bowditch's paper on Consumption in Massachusetts will illustrate my meaning:—"1. Four grandparents lived to a healthy old age, and died over eighty years old. One of the grandmothers always bore on her neck scars, said to be from scrofulous ulcers in early life. 2. Two brothers, A and B, married two sisters, both couples being children of these grandparents. All parties were in perfect health at the time of marriage, and with no thought of consumption ever entering their families. 3. After his marriage A stayed in the old homestead, situated on a southern slope, a dry and warm, well-drained spot, where he was born, and there all his children were born, and reared to adult life. B, on the contrary, moved to a house subjected to wholly different influences, and there his children were born and reared to adult life. The statement of the two families may be made briefly as follows. Both families, as we have seen, had by one

grandmother slight tendencies to scrofula, although consumption proper had never entered into the known tendencies of any ancestor. This was, in fact, a strong belief in the minds of both families. Of thirteen persons (parents and children) in family B, nine have died; seven (more than two-thirds of them) by consumption; one of croup, and one of diabetes. Of the surviving four (father and three children), one has been for years slowly suffering from apparently pulmonary disease. The three others—namely, father and two sons—are healthy; but these two have not lived in the homestead for many years. On the contrary, of the eleven (parents and children) in family A, three have died (less than one third), and not one has died of consumption, though one died early with scrofula." It remains to be added that B's house was situated at the foot of a hill in the midst of wet meadows, and not far from "a bog which is wet all the year through." Dr. Bowditch gives several other similar histories of houses in low, damp situations, whose inhabitants met with a like fate. The sporadic distribution of the bacillus furnishes the best explanation of cases such as these; and that this distribution is effected by means of direct personal contagion is extremely unlikely. Were it carried to, it would almost certainly be carried from, these foci of infection; and this by no means always happens—e.g., it did not do so in the case of Miss R.'s three apprentices, in the instance just quoted from Dr. Bowditch, or in my own case at New-cross. Indeed, in this last the fact came out very strongly, not only that the infected persons did not serve as carriers of the disease to others, but also that they themselves showed marked and rapid signs of improvement when withdrawn for a time from the unwholesome local influence.

To say nothing of Professor Tyndall's bacteria-clouds, there is no want of facts in connexion with plant life illustrating the possibility of organisms flourishing most vigorously in very narrow, isolated, and widely separated spots—e.g., in "Island Life," by Mr. Alfred Wallace, at p. 481 (note) I find the following statement:—"A correspondent in Tasmania informs me that whenever the virgin forest is cleared in that island there invariably comes up a thick crop of a plant locally known as fire-weed—a species of senecio, probably S. australis. It never grows except where the fire has gone over the ground, and is unknown except in such places. My correspondent adds:—'This autumn I went back about thirty-five miles through a dense forest, along a track marked by some prospectors the year before, and in one spot where they had camped and the fire had burnt the fallen logs, &c., there was a fine crop of fire-weed. All around for many miles was a forest of the largest trees and dense scrub.' Here we have a case in which burnt soil and ashes favour the germination of a particular plant whose seeds are easily carried by the wind, and it is not difficult to see how this peculiarity might favour the dispersal of the species for enormous distances, by enabling it temporarily to grow and produce seeds on burnt spots."

Again, I must repeat here that those cases only can be admitted as evidence of contagion in which the disease appears within a moderate interval after the last exposure to the supposed source of infection. Granted that the period of incubation is unknown, and may even be very variable, still all our present knowledge, gained from inoculation and feeding experiments and the results of exposing animals to an atmosphere loaded with finely-divided tuberculous matter, points to the probability that the period is a short one. Certainly cases in which it must have lasted for over a year ought not to be used as a double-barrelled argument to prove at once the contagiousness of phthisis and the great length of its incubation. These cases are best explained by the theory of local as against personal infection. It is noteworthy that scattered instances apparently establishing the existence of contagion occur in the history of ague as well as in that of phthisis. Thus, in the article on Intermittent Fever in the "Cyclopædia of Practical Medicine," edited by Drs. Forbes, Tweedie, and Conolly, I find the following passage: "Some authors have supposed ague contagious. This was the opinion of Baunarez and Cibet in Spain, Bailly and Andouard in France, and Cleghorn and Fordyce in our own country. Cases have fallen under the writer's observation which have led him to entertain at least a suspicion that such was the fact; but the most forcible case for the affirmative of the question which he has met with is one related by Bailly: 'A lady arrived in Paris with an intermitting fever, which she had contracted in the country in a marshy situation. This fever was accompanied by violent vomitings and other serious symptoms, which displayed themselves at every paroxysm, and forced me to give bark. Scarcely was she cured, when her husband, who had never quitted Paris, but who had had the imprudence not to keep himself apart from her during her illness, was struck with the same symptoms and in a manner altogether similar.'" As I have endeavoured to show in the case of phthisis, apparent instances such as this of an infectious ague may have been either accidental coincidences or cases of the recrudescence of an old contagion, or due to some unsuspected local, not personal, infection; perhaps, now and then, there may have been an error in the diagnosis of the first case, in the same way that it is by no means difficult to mistake visceral syphilis for tuberculosis. Without denying the great difficulty of proving a negative, there is still no doubt that the non-occurrence of phthisis under certain conditions does establish a strong presumption that it is not spread by direct contagion. The facts relating to the Brompton Hospital, recorded by the late Dr. Cotton and Dr. Theodore Williams, are too well known to need repetition here. But the same immunity from phthisis has also existed among the various officers of the City of London Hospital for Diseases of the Chest, to which I was myself at one time attached. On this point I have been favoured with the following statistics by the secretary, Captain Storrar Smith. Of thirty-one physicians who have had care of patients since 1855, with one single exception, the details of which I cannot learn, none have suffered from phthisis. Of twelve resident medical officers whose tenure of office has varied from one or two to five years, one only has died of phthisis; he was attacked by hæmorrhagic phthisis, which ran a very rapid course, before he had been more than about a twelvemonth in the place. Of five chaplains none have suffered from phthisis. Of three secretaries one was delicate when he took office, and eventually died of some chest disease. Of four matrons resident in the hospital, the first and the present one having been each there for more than ten years, none have had phthisis. Since 1867 there have been 255 nurses, sisters, and female servants employed in the hospital; of these one, a nurse, has died in the hospital of phthisis, and thirty-three have left on account of illness. Of these latter some, but certainly not all, were phthisical. Since 1865 there have been thirty-four male servants at the hospital; of these one, the house and out-patient porter, died of phthisis between the age of forty-eight and fifty, after seven or eight years' service. He had been in the army, had a fistula, and drank freely. Another out-patient porter, after service with the institution from its commencement, was discharged in 1882, on account of ill-health; a week or two ago he was in the hospital with bronchitis. Out of seven dispensers since 1860 one died while away on sick leave, probably from phthisis. His wife died a few years before from phthisis. He was about fifty when he came to the hospital, and sixty-three when he died. Of fifty-one clinical assistants, the appointment involving residence, I know certainly that two or three have become phthisical, but I have not been able to learn the history of a sufficient number to draw any conclusion. I think, however, that in the case of very many of these the fact of their being attacked by phthisis would have come to my knowledge. On the whole these facts negative the idea of any direct contagion under the ordinary conditions of hospital residence and service.

Finally, allow let me to recapitulate the conclusions which I have endeavoured to establish as to the ætiology of phthisis with special reference to its contagiousness. None can be more sensible than myself of the many imperfections in the matter and form of my argument.

1. The historico-geographical argument is insufficient to prove that the present distribution of phthisis has been brought about by the carriage along lines of human intercourse of a special morbific germ. Indeed, many of the facts under this head are distinctly antagonistic to any such theory.

2. Before the discovery of the bacillus, one and all of the reputed causes of phthisis were inadequate to account for its distribution, or for the anatomical and clinical characters of the disease.

3. That these causes, even those among them which appeared to act as exciting causes, were all predisposing causes only.

4. That from the nature of these predisposing causes, their relation to each other and the conditions under which

their influence seemed to make itself felt, it was a probable inference that phthisis belonged to the group of specific febrile diseases, and that this view was held by some writers in the face of many difficulties and perplexities.

5. That the facts on which this inference was based were insufficient to prove that phthisis was personally contagious, and were indeed rather opposed to any such notion.

6. That the discovery of the bacillus proved that phthisis was a specific febrile disease, and thus the question of contagion cannot now be usefully discussed without acknowledging this fact.

7. That as some specific febrile diseases are contagious, and others not so, this property existing in very different degrees and modes in different members of the group, the question as to the contagiousness of phthisis can only be satisfactorily answered by direct evidence of its contagiousness and by determining its affinities with other members of the group.

8. That although phthisis may be undoubtedly produced in many ways experimentally in animals and also probably in man, there is not sufficient evidence to prove that its prevalence is materially affected by direct contagion.

9. That in many most important respects it very closely resembles ague.

10. That it is at least highly probable that the exciting cause of phthisis, like that of ague, be it the bacillus or some other micro-organism, is in no way dependent upon man for its existence, and is widely diffused, irrespective of human agency.

From these I may be allowed to make one short practical deduction—namely, that the prevention of phthisis, like that of ague, is to be attained by sanitary works, especially by improved ventilation and drainage, and not by isolation. And that for its cure, as we should not send a case of ague to the Pontine Marshes, so, too, it would be wise not to send a case of tubercular disease to any place where the death-rate from phthisis is high among the native population.

Clinical Remarks
ON THE
USE OF THE ACTUAL CAUTERY IN DISEASES OF THE JOINTS.

By HENRY SMITH, F.R.C.S.,
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ON the recent occasion of a patient being brought into the operating theatre of King's College Hospital for the purpose of undergoing treatment by the actual cautery for disease of the knee-joint, Mr. Henry Smith made some remarks on the employment of this agent. He stated that, whilst in former times the actual cautery had been employed to a considerable extent by surgeons, it had gradually fallen into disuse, in consequence probably of the seemingly cruel and painful nature of the operation, so graphically described by the late Sir William Fergusson in his "Practical Surgery." Since, however, the introduction of anæsthetics, by means of which this potent remedy could be applied without the horrors formerly accompanying it, the actual cautery had been resorted to without scruple, and the pupils attending his class had had recently several opportunities of witnessing the extraordinary benefits produced by its application. He desired to call attention to two other instances of disease of the knee-joint, occurring in females, where the effect of one application of the actual cautery had been remarkable. In one of these cases the disease had been of long standing, the joint being in a state of chronic inflammation, the chief symptoms being severe pain on any attempt to move it and some swelling. After the employment of various measures, which were of little use, the actual cautery was freely applied, with almost immediate relief and ultimate cure. In the other case, that of a woman who had been suffering from chronic inflammation of the femur, which had implicated the knee-joint, and resulted in great enlargement of the bone and anchylosis of the joint, attended with most severe pain and total loss of use of the limb, no treatment seemed to be of any avail until the cautery had been freely used over the end of the femur and knee, and those present had been able to witness the effect of this agent, which resulted in immediate and permanent relief. In another case which had been before their notice, that of a young woman with disease of the hip-joint, the symptoms denoting progressive disintegration of the articulation, the usual treatment was adopted—namely, rest, extension, and local applications,—but although the acute symptoms were relieved, intense pain persisted, especially at night. The actual cautery was applied, and the effect was to mitigate the pain within a few hours and ultimately the course of the disease was arrested. Another striking instance of the good results produced by the cautery had recently been under their notice. It was the case of a poor woman who had suffered for some time from disease of the spinal column in the dorsal region. There was some curvature, very severe pain on pressure over three of the vertebræ, and latterly the woman had lost control over the bladder. After she had been kept at rest for some little time, and the more urgent symptoms had been relieved, he applied the actual cautery freely over the diseased vertebræ, and at the same time administered mercury internally so as to produce gentle ptyalism. The effects were almost immediate: pain was relieved within a few hours, the bladder symptoms were removed, and in the course of six weeks the woman left the hospital convalescent, having been previously fitted with a Sayre's jacket. In an instance also of disease of the ankle-joint in a strumous lad, where the features of the case pointed to mischief in the bone rather than in the synovial membrane or cartilage, he was on the point of amputating the foot, but before doing so he determined to apply the cautery freely. This was done under ether, and with such good results that the patient left the hospital with a stiff ankle but a serviceable foot.

Mr. Smith said he was anxious to draw their attention to one important point in connexion with this means of treatment. It should not be used in instances where acute inflammatory action existed; it would be necessary to abate the acute symptoms before using the cautery. In all the instances alluded to this had been done, and the actual cautery was then applied; in fact, as he had often pointed out to the pupils in the wards, it was in those instances where the chronic inflammation was going on, threatening progressive disintegration of the joint structures, and especially those instances where constant pain was a notable symptom, that the actual cautery was such a powerful help to the surgeon; and he strongly advised its use in such cases before resorting to more severe proceedings.

THE TREATMENT OF
SIMPLE AND SLOUGHING DYSENTERY BY LARGE DOSES OF IPECACUANHA, GIVEN MORNING AND EVENING ONLY.

By JOSEPH EWART, M.D., F.R.C.P.

(*Concluded from page 795.*)

BEFORE the late Dr. Parkes wrote his "Remarks on Dysentery and Hepatitis in India" (1846), enlargement and inflammation of the solitary glands in dysentery had been observed and described by Hodgkin, Copland, Ballingall, Raciborski, Dr. Murray and Mr. Twining of the Bengal, Dr. Lorimer of the Madras, and Dr. Bird of the Bombay Medical Service. But, as Parkes says, "Most of these writers appear to have regarded their existence as incidental, and not to have proclaimed their relation to dysenteric ulceration with sufficient accuracy and distinctness. Ballingall and Twining describe them as if they were pustules. Murray describes them very accurately, but calls them vesicles and pustules." It is, however, to the researches of Parkes, whilst serving with European troops in Madras and Burmah, that the true nature of these morbid conditions, and their association with the solitary glands were first correctly established. Speaking of these glands he says, "I have considered them not to be large mucous crypts, for the following reasons:—They present the appearance of round opaque bodies, without apparent orifice, imbedded in the

mucous membrane, and even apparently attached to the submucous cellular tissue. In the early stage of dysentery, their contents are white, yellowish, and apparently thickened and starchy. They are sometimes streaked and striated on the surface, and bear on the summit, in some cases, a small black point, which looks like an orifice closed up. This is not, however, general, or even common. Under the microscope, the mucous membrane presents the usual appearance of small honeycombed cells. In a dysenteric case which has lasted two or three days, they are still more obvious. A minute vascular ring surrounds them, they become prominent, and a little hardened to the touch. In distribution these glands appear equally numerous in the sigmoid flexure, as in the cæcum, and on this account I am disposed to regard them as perhaps the excreting organs of the colon. . . . Whatever opinions may hereafter be entertained regarding their nature and functions, one point has been fully established by my dissections—viz., that they are the seats and centres of ulceration in tropical dysentery."

At page 410 of "Quain's Dictionary" (1882), my own observations of the changes occurring in the solitary glands during the earlier career of tropical dysentery are described from dissections. The *first* visible change is congestion, the vessels surrounding and penetrating the capsules being turgid and engorged with blood. The *second* change is augmentation of their contents from the accumulation of albuminous exudation, and enlargement "from the size of a millet seed to that of a small shot" (Baly). The *third* stage is, provided the inflammation advances, rupture of some of the capillaries in the interior of these little vascular glands, extravasation of blood, with the area of the ordinary dark point on the free aspect increased. The *fourth* stage is now marked by atrophy and molecular disintegration of the free aspect of the capsular wall, and escape of its morbid gelatinoid blood-tinged contents into the canal of the intestine. This is the rule; but, in very exceptional cases, the capsule may burst through the attached portion, lighting up inflammation in the neighbouring connective tissue and muscular coat. In a large number of instances, the morbid process may stop short, under proper treatment, at any of the first three-mentioned stages, and repair is then effected by resolution. In many cases the morbid action is cut short after the completion of the fourth stage without further extension of the disease. The adjoining follicles of Lieberkühn do not, in these cases, necessarily participate to any great extent in the diseased process. Under these conditions, when the whole of the exudation has been expelled, the glands regain their tone and functions, and recovery, rapid and complete, ensues. It is not often possible to illustrate these conditions in the post-mortem room; because when death supervenes from dysentery alone, the ravages committed upon every structure of the mucous membrane are so extensive as to destroy the earlier physical phases of the disease. In some cases, however, which have died from intercurrent affections, I have been able to demonstrate the earliest stages successfully to my students, at a period prior to the implication of Lieberkühn's follicles, of which the mucous membrane is, in great part, composed, and to exhibit to them the gelatinoid exudation termed by others "gelatinous mucus," free from, or tinged with, blood taken from enlarged and diseased solitary glands. See also *Indian Annals of Medical Science*, p. 190, No. 23, 1868. In some specimens, I have been able to recognise every gradation of disease from this point, to molecular disintegration of these glands with a few of the surrounding tubular glands, their exfoliation *en masse*, ulceration, more or less extensive, and sloughing in varying degrees as to extent and depth.

With reference to this question, Sir Joseph Fayrer quotes Dr. McConnell, Professor of Pathology in the Calcutta Medical College and Hospital, who says, "The disease commences essentially and primarily in the gland structures. I have had opportunities of seeing several cases—i.e., post-mortems, at a very early period; and then the only visible alteration is in the solitary glands and follicles of Lieberkühn; the former especially, which I have found enlarged to the size of small hazel-nuts, and filled with that glazy, semi-transparent, glue-like mucus which we almost always find voided with the earliest evacuations during life in this disease" (1881).

In the cases, of which I have records, there was specific inflammation of the solitary glands, and by extension, of some of the tubular follicles, either stopping short of, or advancing to, ulceration to a limited extent. In all the recognition and registration of morbid products, such as blood, gelatinoid exudation, ropy mucus, and so forth, as these are passed, in accordance with the method, first systematically adopted by the late Dr. Edward Goodeve, and fully described by Prof. Chevers in Sir Joseph Fayrer's Lettsomian Lectures (1881), are of primary importance. By the employment of carbolic acid, or other colourless deodorant, the examination of the stools is deprived of the greater part of its repulsive character. The procedure is essential to accuracy of diagnosis, and indispensable to the formation of a sound prognosis, whilst it enables the physician to appraise at its true value, and with wonderful exactitude, the progress of the pathological changes taking place, and the effects produced by our sovereign remedy—ipecacuanha. Hence the care with which the dejecta are washed and scrutinised, with a view to note the character and quantity of the bloody mucus, gelatinoid exudation, and ropy or tenacious mucus expelled; their diminution and eventual disappearance under the administration of large doses of ipecacuanha, constituting as they do, with the cessation of tormina and tenesmus, the signals for stopping the further use of the drug.

Invaluable as ipecacuanha, in large doses, every twelve hours, and associated in the intervals with the use of such other medicine as may be indicated—quinine, for example, for the correction of malarial poisoning or fever, small anodyne enemata for the relief of tenesmus or tormina, fomentations and counter-irritants to the abdomen, and nutritious and easily digestible food in a liquid form, is, in the management of the simple and non-sloughing forms of acute dysentery, it is, *par excellence*, in ordinary sloughing, as distinguished from extensive sloughing and gangrenous dysentery, where its curative, or rather its conservative, power is conspicuously displayed. In this, the immediate danger is the extension of the sloughing into the gangrenous form; and, even when this is averted, so much destruction of tissue as to involve subsequently cicatricial contraction and eventual lifelong embarrassment or fatal obstruction, not to mention the thickening and consequent narrowing of the lumen of the intestine and other sequelæ, should the case become chronic. It, therefore, occurred to me, after much observation of the therapeutical action of ipecacuanha in the simpler and less severe forms of the disease, in which sloughing did not happen, that, if given in the manner advocated in this communication, it might arrest the progress of sloughing dysentery, limit the area of its destructive ravages, and so place the intestinal mucous membrane, after the dead portions of tissue or sloughs had been successfully cast off, as nearly as possible in the same advantageous position as it usually occupies in an ordinary case in which ulceration has occurred; that, in like manner, the risk of transition into a hopeless condition of gangrene, or into a chronic state, and the dangerous results adverted to, would be materially diminished. An attentive perusal of the subjoined case under my care, some years ago, in the Calcutta Medical College Hospital, will show that my anticipations were fully realised.

The microscope was, I may premise, in constant use, to determine the character of the sloughs, which were also floated out in water and outlined daily, as they were observed, on the bed-head tickets.

CASE 18. *Acute Dysentery terminating in Sloughing* — Bhoodhun, aged forty, resident of Jalkhano Potee, Hindoo of the Sudra caste, was admitted into the Medical College Hospital on Dec. 5th, 1866. The patient had been suffering from bowel complaint during the previous six days, passing many scanty, slimy, and bloody stools daily, with much griping and straining. He was perfectly well before, and could assign no cause for this attack. He was much prostrated. He was ordered by the officer on duty five grains of ipecacuanha with ten grains of bismuth every six hours, and milk diet. 4.30 P.M.: Passed five scanty motions, with great griping and straining. Slime and blood abundant. Ordered a drachm of ipecacuanha, with ten grains of bismuth, night and morning. Diet as before; one pound of ice.—6th: Passed several scanty motions, containing blood and some gelatinoid exudation, with some small portions of feculence. The patient complained of griping and straining. Pulse feeble; tongue dry and furred; considerable thirst; vomited twice in the night. Prescription continued. 6 P.M.: Retched several times; griping much less. To have an anodyne enema daily at bedtime to restrain the tenesmus. Prescription continued.—7th: Passed seven stools in the night, consisting of greenish-yellow semi-feculent fluid, at the bottom of which was found, on washing, five pieces of gelatinoid exudation tinged with blood, and a large quantity of bile.

stained coagulated exudation. Had very little griping, no tenesmus or vomiting. The pulse had improved; tongue coated with brown fur, but moist. Prescription continued; also jelly. 6 P.M.: Had three stools of the same character as those described in the morning report. Prescription continued. — 8th: Had four motions during the night, no griping, no straining, no vomiting, with very little gelatinoid exudation. 6 P.M.: Bowels moved once only since morning. Prescription continued.—9th: Three motions; no griping; no straining; no vomiting; feels better. The motions consisted of greenish-yellow fluid with feculent sediment, several pieces of firm, drab-coloured sloughs, without any gelatinoid or blood-stained exudation. Pulse 76; temperature normal. The largest slough was about three inches long by one in breadth, and was found to be constituted principally of exudation and mucous membrane undergoing granular degeneration. Ipecacuanha omitted. Ordered an ounce of chalk mixture with ten minims of laudanum and twenty grains of carbonate of soda, as circumstances require; an ounce of rum mixture every four hours; diet as before, with four ounces of port wine.—10th: During the last twenty-four hours the patient has passed three motions, one during the day, and two during the night. The former consisted of yellow-figured fæces smeared with blood, and one portion of firm yellowish slough, the latter of dark feculence, with a number of sloughs—a large drab-coloured one. Part of this consisted of mucous membrane and submucous cellular tissue. The transverse lines, however, indicated the site where the transverse muscular fibres existed. Most of these were found to have undergone transformation, but the identification of some involuntary muscular fibrils was complete. There were ten drab-coloured sloughs, so much infiltrated with exudation that few of the remains of the mucous membrane could be recognised. Altered connective tissue and a few tubular glands distended with granular matter were observed. In nineteen others no structural characters could be detected. Prescription continued. — 11th: Passed two stools, tolerably well formed; but on washing them, a number of small sloughs, chiefly consisting of exudation, were found; also a large drab-coloured slough in which unstriped fibres were discovered, and three of a similar colour made up mainly of exudation with mucous membrane in a state of granular degeneration. Prescription continued.—12th: Had only one formed motion last night, without a trace of blood or gelatinoid exudation. Prescription continued. — 13th: Doing well; bowels not opened during the last twenty-four hours. Ordered ten minims of dilute nitro-muriatic acid in an ounce of infusion of chiretta, three times a day. Diet and wine as before.—14th: One motion since last report; appetite greatly improved. From this date the amendment was uninterrupted; the bowels acted with regularity, and nothing abnormal could be detected in the evacuations. On the 25th all medicine was omitted. On the 29th he was placed on half-diet, with fish instead of dhal, and, in addition to his port wine, was allowed four ounces of rum. He was put on full diet on Jan. 6th, 1867, without dhal. He left the hospital on the 12th, perfectly well.

The practice of washing the evacuations is very valuable when it is suspected, from swollen and tender portions of the colon, that sloughing is impending, or when the provisional diagnosis is subsequently confirmed by the passage of sloughs in the dejecta. As in cases of the simpler or milder forms of the affection, so even in the severe and aggravated varieties of sloughing dysentery, the existence and persistence of gelatinoid exudation in the stools are the unerring indications for perseverance with the ipecacuanha. (Here I exclude very extensive sloughing and gangrenous dysentery, usually fatal.) The exudation is heavier than the remainder of the stools, and is invariably found at the bottom of the utensil. That from one solitary gland seldom coalesces with that of another. Hence the number of these little masses of gelatinoid exudation, more or less tinged with bile, blood, or pus, and surrounded with catarrhal, or it may be ropy, mucus from inflamed tubular glands in the vicinity of the disease, affords some idea of the extent of mischief superadded to the sloughing going on within. It constantly happens that quantities of this characteristic—I had almost said pathognomonic—exudation are poured out during the sloughing process. The existence of this product in the evacuations regardless of sloughing is, according to my experience, the index for the continuance of the ipecacuanha. On the other hand, its disappearance, equally regardless of the passages of sloughs, is the indication for the cessation of the powder. It not infrequently happens that sloughs, which may have been hanging on by a mere shred, or, delayed in the exhausted and semi-paralysed gut, are not completely detached and expelled for some days, after all traces of the dysenteric exudation have vanished. The question to be solved, therefore, in these cases is not whether the ipecacuanha is to be discontinued because sloughing is suspected to be going on, but whether gelatinoid exudation is still discovered in the washing of the stools, in which case, the drug must be administered, in full doses, without much concern, as a rule, about the existing sloughing. In this way, the extension of the mischief and the sloughing process are reduced to the narrowest possible limits. When the sloughs are all cast off, the resulting ulcers are usually repaired under absolute rest, liquid nourishment, and appropriate medicines, quickly and successfully.

In these cases, the ipecacuanha was not persisted in because it was supposed to have any power to prevent sloughing already in progress, but because it placed those solitary glands in the immediate vicinity, engaged in dysenteric inflammation, in the most favourable position to resist the tendency to disintegration by molecular ulceration, and to undergo reparation; and the living though damaged structures connected with dying and dead tissue or sloughs also in the most advantageous condition for throwing them off with a minimum of shock and of extension. Doubtless, in some of my cases, the ipecacuanha was administered longer than was necessary. But it should be remembered that to me, at least at the time, the practice was novel, and sufficient experience had not been gained to enable me to judge as to the period when it might be safely discontinued. After all, the point is not of much importance, for the drug, when given at long intervals and in the large doses recommended, is borne with a minimum of stomach disturbance and of interference with the digestion and assimilation of mild, unstimulating, and liquid food. Although, in my subsequent practice, I was often able to leave it off sooner, still I feel convinced that when there is doubt from the local indications, the subjective symptoms, and the character of the dejecta, it is safer and better to give too much of it than too little.

How does ipecacuanha act? Its effects in simple and ordinary sloughing dysentery are very striking, equally illustrated by clinical observation, and, in a measure, by physiological experiment on healthy dogs. Thus it acts:—1. Directly and locally as a slight irritant upon the peripheral nerves of the mucous membrane of the stomach, provoking anorexia, nausea, retching, or vomiting (not always); but when repeated, as often happens, the organ becomes more tolerant of its presence. Even when vomiting takes place, the drug is seldom rejected in quantity; if it is, another dose given soon after is usually retained. Doubtless, its retention is much facilitated by abstention from swallowing fluid, until it has passed out of the viscus, partly by absorption of its active principles and partly by the passage of the remainder into the duodenum, where and lower down, the balance is taken up probably by the intestinal veins; by the munching of small pieces of ice only; and by the maintenance of the head not much higher than the level of the heart. When I first went to India it was the custom to begin the treatment of intermittent with an emetic. My practice then was mainly among natives. I constantly found that the drachm of ipecacuanha given, under such circumstances, produced no vomiting whatever; and, on inquiry, I discovered that this was due to my patients refraining from draughts of warm water. When these were taken, the emetic action of the drug was fully developed. 2. It augments the aqueous character of the secretion of the salivary glands, and of the secretions along the whole of the alimentary mucous tract. The flow of fluid in the mouth, in from twenty minutes to half an hour after its administration, or earlier, is marked and characteristic; and it probably exerts a similar influence on the pancreas, the tubular glands of the stomach, and the intestine. 3. It increases the flow of healthy and unirritating bile, thus depurating the blood, and producing a comforting laxative action, relieving the local congestion and portal plethora, and soothing the diseased parts subsequently by the promotion of physiological repose. Hence the speedy moderation and eventual suppression of tormina and tenesmus. 4. It diminishes the force and frequency of the pulse by lowering vascular tension generally. 5. It promotes general diaphoresis. As the active principles of ipecacuanha become absorbed, and are brought to bear upon the vaso-motor centres, regulating and controlling the functions of the

chylopoietic viscera, the alimentary mucous membrane, the organs of circulation and the skin, soon after it has been taken, the above-mentioned effects are promptly produced.

It is probable that, in dysentery, the extreme irritability of the seats of disease increases, by reflex action, the previously existing obstruction to the onward flow of blood through the liver, from an already overloaded portal system, thus opposing an obstacle to the relief of the congested and inflamed parts. This is the condition which invariably precedes and accompanies dysenteric disease of the solitary glands. Nature often succeeds in mitigating it, either by hepatic catarrh, or a bilious attack, with or without purging, and the subsequent enforced starvation. In other cases, the portal plethora may have been successfully rectified by diarrhœa. When, as is too frequently the case, she fails, the miasm or poison may take effect, and light up the disease. The condition of pre-existing plethora is aggravated by increased disturbance in the balance of the portal circulation. Ipecacuanha, by its sedative or depressing power over the vaso-motor centres, lessens the tension of the venules and arterioles of the portal and general circulation, promotes exosmosis from the skin and alimentary mucous membrane, equalises and restores the balance of the portal circulation, and places the affected parts in the best possible position to undergo repair, and the as yet unaffected but threatened glands to resist invasion. Hence the relief of the tormina and tenesmus by prompt modification or mitigation of the morbid conditions upon which they are dependent—viz., congestion and hyperæsthesia of the muscular structure underlying the inflamed lenticular and tubular glands rendering peristalsis painful and spasmodic; the rapidity with which convalescence follows in the non-ulcerative forms of the disease; and the success with which the healing process is promoted in molecular ulceration, or that which has succeeded sloughing, whilst the extension of sloughing into gangrene is prevented.

The cholagogue action of ipecacuanha has been experimentally established on dogs by Professor Rutherford. He says: "Ipecacuanha is a powerful hepatic stimulant. It increases slightly the secretion of the intestinal mucus, but has no other apparent stimulant effect upon the intestine. The bile secreted under the influence of ipecacuanha has the normal composition."[1] The great importance of this stimulation of the function of the liver, signifying, among other things a healthy balance in the portal circulation, always disturbed in unchecked dysentery, will be clearly recognised, especially when it is borne in mind that, as pointed out by Dr. Lauder Brunton at the Ryde meeting of the British Medical Association in August, 1881, "the liver has a power of regulating the flow of blood, not merely through itself, but through the rest of the abdominal viscera, as the stomach and intestines." If ipecacuanha did no more than restore the equilibrium of the portal circulation, its value in dysentery would stand even then unrivalled; for it would tend to remove the congestion and strain on the inflamed structures in the colon. To this great virtue, we may now add Rutherford's experimental, to a great mass of clinical, evidence, proving its influence in augmenting the secretion of healthy bile; and though his experiments on healthy dogs led him to conclude that the intestinal mucus was only slightly increased, this result is scarcely consistent with the copious liquid evacuations following full doses of the drug. It is true that these are largely tinged with bile, and that they contain a good deal of it; but, after all, it forms only a small proportion of what is now known as "the ipecacuanha stool."

[ERRATUM.—In the first part of this article, p. 794, second column, line 1, for "about half an hour or so," read "about an hour or so."]

Brighton.

[1] British Medical Journal, Feb. 8th, 1879.

METROPOLITAN AND NATIONAL NURSING ASSOCIATION.—From the report which was read at the eighth annual meeting of this Association, recently held, it appears that in the course of the first twelve months 652 cases had been nursed, and 21,645 visits had been paid; the debt, which at one time was considerable, had, at the end of 1883, been reduced to £100; the sum of £33 had been received from patients during the year; and 100 more cases were visited than in 1882. At the close of the year the nursing staff of the Society consisted of the superintendent and eleven nurses, and it is gratifying to learn that the applications from ladies wishing to become nurses were very numerous.

EXAMPLES OF

SOME SURGICAL DISEASES AND ACCIDENTS OF RARE OCCURRENCE.[1]

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THE following paper is a record of some cases of surgical disease and accident, which seem to me to be worthy of attention on account of their rarity. They have occurred at various times in my hospital and private practice. As they have nothing whatever in common with one another, I have observed no special order in narrating them.

CASE 1. *Gouty Tumour of Penis.*—On Oct. 10th, 1879, Mr. ——, an unmarried gentleman, in easy circumstances, and considerably past middle life, was sent to me for advice by a medical man. In the penis, about an inch from the pubes, was an oval, slightly flattened, and very hard tumour, about the size of a horse-bean. It was situated between the dorsal and right lateral aspects of the organ. The skin over it was freely movable, but it was in firm attachment to the penis. My opinion was asked on the question of its being possibly of a malignant, scirrhous character. It occasioned the patient no uneasiness while the organ was flaccid; but during erection at night he was always awakened by severe pain in the part, and the penis became distorted and bent at a sharp angle—the angle corresponding in position with the site of the tumour. I recognised here a disease of which I believe I had some years previously seen another example, but did not fully appreciate until some time afterwards, when I read an account of the ailment in Van Buren's "Surgical Diseases of the Genito-Urinary Organs," under the name of "chronic circumscribed inflammation of the erectile tissue of the corpora cavernosa." He says:—"The disease comes on insidiously without apparent cause, although it is liable to be ascribed to local injury. The patient first discovers that something is wrong by noticing a slight pain in the penis, at a certain point, when the organ is erect. On examination he detects a hard flattened mass, with distinct, sharply defined margins, occupying the substance of one or both corpora cavernosa near the surface, and feeling like cartilage—elastic and springy; not with a bony feel like a calcareous plate. The penis bends, during erection, at the affected point, and, along the edge of the hardness, a little pain is experienced. The indurated mass, which is of varying size and usually irregularly oval in shape, may remain stationary for an indefinite period, gradually decreasing at last without moving, or progress slowly backward, or forward, retaining its size and shape, and disappearing anteriorly at the same rate as it advances towards the root of the penis, or *vice versâ*. A slight tenderness is felt along the line of advancing induration, and at all times a little extra uneasiness is produced by pressing the induration between the fingers, as well as felt during erection. The disease occurs after middle life. Two of the patients" (Van Buren details the particulars of five cases) "had suffered very mildly from syphilis; the other three presented no symptom of the disease, past or present, on the most thorough examination. Neither gonorrhœa nor stricture has anything to do with its causation. Specific treatment has no effect on the induration. The skin of the penis is in no way involved. Although no post-mortem, so far as known, has disclosed the exact seat and nature of the disease, yet it is undoubtedly, in essence, a chronic inflammation of a peculiar kind affecting the erectile tissue at a certain point, and so thickening and stiffening the naturally thin walls of the areolæ (probably filling up the interstices with fibrinous exudation) that they cannot be distended with blood during erection of the rest of the organ" (page 25). But a further interest seemed to me to attach to this particular case, since a consideration of all its circumstances tends to throw light on the causation of the disease. The patient, in addition to the little fibrous tumour of the penis, had suffered for a year or two from the common chronic fibrous tumour or knot in the palm of the hand, due to a limited thickening in the palmar fascia, and with which we are all familiar. This, which was well marked, had led as usual to a contraction of one finger. The coincidence of two similar affections in the hand and penis was striking; and, as it is well known

[1] Read before the Glasgow Medico-Chirurgical Society.

that the former occurs for the most part in gouty persons or such as are members of gouty families, it seemed to me no unfair inference that the precisely analogous tumour in the fibrous sheath of the corpus cavernosum of the penis was in all likelihood due to the same diathesis. The patient had also been treated, not long before this, for "rheumatic gout" of the right elbow. This opinion of the similarity in kind, and therefore probably in origin, of the two little tumours I communicated to the patient's medical attendant. Shortly afterwards on reading Sir James Paget's essay on "Gouty Affections of the Urinary Organs" (an addition in the last edition of his clinical lectures and essays), I found the following passage, which seemed to verify my view of the case:—"The maintenance of gleet in connexion with gout and other constitutional diseases is the more important because of the tendency to the production of stricture which is associated with them, and which, but for them, would be, I believe, a very rare consequence of gonorrhœa. In gouty persons the production of fibroid tissue, thickening and contracting the outer layer of the urethral wall, and thus producing stricture, seems to be a process of the same kind as the thickening and contraction of the palmar fascia of which I spoke in the last lecture. Or it may be more nearly compared with that very troublesome and generally gouty thickening and hardening of portions of the fibrous sheath of the corpus cavernosum, which produces distortion of the penis in erection, and sometimes frightens with fright of cancer. Tough bands or lumps of such fibroid tissue may be felt on either side, or more commonly, on the dorsum of the penis, or in the septum; and because they will not yield, as the rest of the structures do, to the erecting pressure of the blood, they hold the penis rigidly bent on them, as in a chordee." In the case I have described two of these three ailments are present at once in the same individual—a strong confirmation of the view that they have a common constitutional origin. It is well to add that the disease here described must be distinguished from gummy tumour of the corpus cavernosum, and also from tumours due to "the deposition of plates of calcareous matter in the corpora cavernosa, one or both, particularly in the fibrous sheath, a condition analogous to atheroma of arteries." (Van Buren.) So far as I am aware I have not met with either of these ailments.

CASE 2. *Hydrocele of the Tunica Vaginalis, in which the Fluid was of Milky Whiteness.*—I was asked to see Mr. N——, a gentleman somewhat over thirty years of age, in February, 1879, with the view of tapping and injecting a hydrocele of the left tunica vaginalis, with which he was troubled. The history of the case was as follows. He had been resident in India for some years, and while there became affected with double hydrocele. Both collections of fluid, after attaining a considerable size, were tapped and injected with tincture of iodine. He is not aware that any unusual character was observed in the fluid removed. The operation was unsuccessful, and after the lapse of some time it was repeated. This second operation also promised to be unsatisfactory in its issue, but in three months afterwards, he having in the interval returned to this country, the hydrocele of the right side, which had been very gradually decreasing, finally absorbed and became cured. That of the left side remained stationary and of large size. On tapping it I was surprised to find the fluid of milky whiteness. It might, indeed, have passed for a sample of ordinary cow's milk slightly diluted with water. I threw into the tunica vaginalis two drachms of the tincture of iodine of the old Edinburgh Pharmacopœia, with the usual satisfactory result. In about three weeks the hydrocele was entirely cured. Under the microscope the fluid showed no trace whatever of spermatozoa, and the whiteness was seen to be due to the presence in great abundance of fatty matter. Chemical analysis revealed, in addition, slight traces of albumen and sugar. I may quote from Mr. Curling's work on "Diseases of the Testis" the following paragraph in reference to similar cases:—"Fluid exhibiting the appearance of milk has in some rare instances been removed from the tunica vaginalis. M. Vidal (de Cassis) describes the case of a middle-aged man with tumours of the scrotum like hydrocele, except that they were not transparent. On tapping one he was astonished to find the fluid which escaped milky white. The fluid from the other side presented a similar character. Vidal alludes also to another case recorded by Sichel. Sir William Fergusson tapped a hydrocele of a German aged forty-two thrice in twelve months, and each time drew off fluid resembling milk. The fluid was exhibited at the Pathological Society, and was carefully examined by Dr. Harley and Mr. Mason, who found that the milky whiteness was due simply to the presence of fatty matter. No spermatozoa were detected in this specimen, nor in the fluid removed by Vidal. The fluid had the characters of the chylous liquid which had been found in the urine, and in the cavity of the abdomen, and probably resulted from obstruction to the lymphatics, or to an escape of their contents. (The intermixture of fat globules in the fluid of hydrocele is supposed by Klebs to result from fatty degeneration of endothelial cells). Vidal applied to his case the ill-chosen term of 'galactocele,' but as the fluid does not possess the characters of milk, this term is likely to mislead. The milky appearance being constantly diffused cannot well be mistaken for the opalescence of the fluid in encysted hydrocele, as in the latter the spermatozoa sink in the fluid and form a whitish sediment" (page 101). I may add that no one, as Mr. Curling here states, who has met with cases of spermatocele (encysted hydrocele of the epididymis) could possibly confound the fluid of such with that now under discussion. The opalescent turbidity of the one closely resembles cocoanut milk (Curling), while the complete whiteness of the other makes it hardly distinguishable from ordinary cow's milk. Moreover, I found the fluid in my case became denser in its upper part when allowed to stand in a vessel, a veritable kind of cream tending to form, while exactly the reverse is the case with that of the spermatocele from the subsidence by gravity of the spermatozoa.

CASE 3. *Spermatocele, containing forty-six fluid ounces.*—A man, fifty-eight years of age, was admitted into the Royal Infirmary on Dec. 14th, 1880, with a fracture of the left fibula. It was found that he also had a very large hydrocele of the right side of seven years' duration, which had not as yet been interfered with in any way. The skin of the abdomen was so dragged down by the weight of the tumour that the orifice of the prepuce alone marked the situation of the penis, which was otherwise entirely hidden. I could feel, and even detect by sight, the situation of both testicles, the right being at the bottom part of the tumour and rather in front, while the left was pushed up towards the left inguinal canal. After a few days he consented to my proposal to operate, and I did this on Dec. 21st. As soon as the fluid began to flow we were able to recognise the nature of the case by its slightly turbid and opalescent character. A drop, placed under the microscope, was seen to teem with very perfectly formed spermatozoa. The fluid measured forty-six ounces, and by the next day, having been left at rest, had separated into a thick, whitish sediment, with comparatively clear fluid above. I injected about two drachms and a half of the old Edinburgh Pharmacopœia tincture of iodine with the best possible result.

(To be continued.)

ON THE

CIRCINATE ERUPTION OF THE TONGUE,

CALLED "ETAT LICHENOIDE" BY GUBLER, AND "LA SYPHILIS DESQUAMATIVE DE LA LANGUE" BY PARROT.

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THE condition to which I wish to redirect attention is an uncommon one in my experience in this country; for although I have for the past three years been assiduously on the look-out for it, I have met with only ten cases, and six of these presented within a short time of one another in the latter half of the year 1883. I have here noted down what has so far been observed in regard to this mysterious affection, in order that those who come across it may help to throw light on its true significance.

History.—Gubler, in the "Dict. Encyclop. des Scien. Méd.," première partie, tom. x., p. 234, 1869, art. "Bouche," wrote a very brief description under the name, "état lichénoïde," which he applied provisionally so as not to prejudge the question of its nature, and because its aspect recalled the form of the thallus of certain lichens. He stated that he had seen many cases. In 1872 M. Bridon, interne

of the Hôpital Ste. Eugénie, wrote an excellent thesis on it, under the title "Sur une Affection innominée de la Muqueuse linguale," or "Etat tigré de la Langue," founded on the observation of five cases. He showed that the affection was familiar to most of the physicians at the children's hospitals in Paris, such as MM. Barthez, Bergeron (Remarks at the Soc. Méd. des Hôpitaux, 1864), Labric, Archimbaud, and at the Hôpital St. Louis, to Lailler, who noted it in 1860. Bridou, however, claims priority for an article entitled "Contributions to the Study of Desquamation of the Tongue," by Dr. Santhus de Hadamar, in the *Journal des Maladies des Enfants de Behrend et Hildebrand*, Sept. 1854. The first publication in England was a description of two cases by Mr. Arthur Barker in the Pathological Society's Transactions for 1880, vol. xxxi., and in the discussion thereon it was mentioned that Sir James Paget had noticed a case of "ringworm" of a man's tongue (Fairlie Clark on Diseases of Tongue), and that Mr. Marcus Gunn had sketched a similar condition on a child's tongue at Moorfields Hospital. Following closely on Mr. Barker's paper came an elaborate account by Professor Vanlair, of the University of Liège, in the *Revue Mensuelle de Méd. et de Chir.* of Jan. 10th, 1880. He selected for description from many cases he had observed three—viz., an old lady of sixty-six years, an adult, and a child. Lastly, Professor Parrot contributed two communications to the *Progrès Médical* of 1881, the second one in answer to an inquiry of Vanlair's, and Mr. Clement Lucas demonstrated the affection in a syphilitic child at the Royal Medico-Chirurgical Society in April, 1881. Caspary and Unna have also written on the subject.

Description.—In Parrot's words the eruption is a circinate desquamation, characterised by rapid evolutions and repetitions. It consists of one or several round raised whitish patches, reaching to the size of a lentil, which enlarge peripherally like a body ringworm, and spread towards the centre and root of the tongue. These patches are thus soon converted into rings with three zones—viz., an external raised, yellowish white, advancing bordering or fringe of heaped-up desquamating epithelium, and closely following this a red zone recently desquamated, and in the centre again a red glazed area over which the epithelium is already reforming. All the central part within the white border is of a red tint, easily distinguishable from the normal red colour of the tongue, and is studded with fungiform papillæ, often unusually prominent. As the rings continue to spread they quickly get broken up into curved or wavy raised white lines, and may cut another to form various patterns which are familiar to us in connexion with various affections of the skin. Each ring lasts in some part of it from about five to six days, as a rule (Parrot), and before it has died a second and a third, and still others, may follow from the borders of the tongue towards the centre and base, where they can be no longer traced. The rapidity of spread varies, however, for sometimes the rings extend very slowly, and at other times very rapidly. On the whole the rapid evolution is as striking a feature as it is in some of the ringed phases of erythema multiforme. As to the size the rings may attain, Bridou estimated that any segments seen rarely belong to circles more than eight to ten millimetres in diameter. The site occupied by the eruption is another curious feature, for almost invariably (Bridou, Parrot) the rings start from the upper surface of the tongue near the sides and tip. Vanlair says it attacks indifferently the base and tip. In my experience the rings start only occasionally from near the raphe and centre, and it tends to be a bilateral affection. Bridou says the inferior surface and sides of the tongue are not invaded, Parrot says rarely, and Barker noted the rings to occasionally creep over the borders but not to attain the floor of the tongue or buccal mucous membrane. It follows from this that the white patches arising near the borders of the tongue enlarge into spreading segments of circles. Vanlair's experience, however, is that the rings may extend to the under surface, and then he says their centre is livid and the spreading edge red, instead of white, and so less conspicuous, because of the absence of filiform papillæ here. As for subjective symptoms, they are but slight; the sensations of taste and touch are unimpaired, but occasionally there is more or less itching present and dribbling of saliva. The commencement of the eruption is obscure, and nearly always unheeded or unnoticed by the parents, and its duration equally uncertain. The subjects of it appear to be liable to constant repetitions, or it may remain absent for several months or years till excited by an illness. There is no doubt that it is essentially an affection of childhood, and Parrot in thirty-one cases met with it six times in the first six months, nine times in the second six months, and seven times in the second year, making twenty-two cases in the first two years of life, against nine cases from two to six years of age. It has been seen to recur up to eight years old, but after a time the recurrent tendency appears to die out. It is now and again met with, however, in the adult, for Lailler saw it in a man of twenty, Bergeron in one of his internes during convalescence from enteric fever, Sir James Paget in a man, and Vanlair in ladies aged twenty and sixty-six respectively. Gubler is the only observer who declares that it may be habitually present in some.

Etiology.—As to sex, Vanlair thinks it occurs mostly in females, but has not observed heredity. Gubler, however, believed it to be hereditary, and stated that he had seen entire families affected. In a case of Bridou's the mother recognised the affection as one she had also suffered from in childhood, and I have had a like experience with him in meeting with it in a brother and sister. Anatomical evidence points, in Professor Vanlair's opinion, to the fact that the affection is a subacute papillitis of the filiform papillæ, and that the white patches are formed by the proliferation of epithelium, which subsequently exfoliates copiously. In this process these papillæ are sometimes destroyed, and in such a spot the rings no longer form. M. Martin, the chief assistant in Parrot's laboratory, found, from the microscopic sections of three tongues, that the derma was the chief seat of the disease, the epithelium was thickened and swollen, the corneous layer cells increased in volume, the rete so also and actively proliferating, and the papillæ and adjacent derma contained many lymphoid corpuscles around the vessels. In Paris, at the time Bridou wrote, nothing was definitely known as to its nature, but there was a general agreement to exclude a parasite, and a constitutional vice such as herpetism, dartre, or syphilis, and in this view Bridou and Vanlair agree. All observers allude to the coexistence of dyspeptic troubles, and hence the surface of the tongue, on which the rings form, may be the seat of various degrees of inflammation and furring, or on the edges of ulceration. Lailler and Archimbaud connected the reappearance of the rings in two infants with the outbreak of any illness; Bergeron, Gubler, and Vanlair all noticed gastro-intestinal disturbance, and this has also been my experience. These facts lend some support to Mr. Barker's view of the reflex nervous causation of the patches. Unna considered the affection to be a trophoneurosis.

The aspect of the rings is very suggestive of ringworm, and in four of my cases tinea tonsurans was present, and in one infant in addition ringworm of some finger-nails, which were constantly being sucked. Mr. Barker is the only observer, however, who has found the trichophyton fungus in the tongue, and he only in one case, and on one occasion, so that he discards the parasitic theory of causation. I have repeatedly examined all parts of the affected tongues with great care and never could find any trichophyton fungus. Scrapings show corneous epithelium singly and in groups, and as casts of the filiform papillæ, rete cells, saliva corpuscles, and invariably the thallus filaments and spores of the leptothrix buccalis. Vanlair figures this alga, and shows that Robin regarded what are really the spores as a granular detritus serving for the nutrition of the threads. Large aggregated masses of these spores are always met with, and often surrounding some foreign body, which Vanlair thinks are altered vegetable fibre, but which I feel certain is almost invariably an epithelial cast of a filiform papilla. To show that this alga does not stand in any causal relation to the eruption, I may say that I have examined many tongues, both of children and adults, and always found plenty of the leptothrix present.

Parrot unhesitatingly pronounced the affection to be a manifestation of congenital syphilis, and stated that out of forty-six cases he found incontestable signs of syphilis in forty-one. It will not be surprising to those acquainted with his views to read that at the Hospice des Enfants Assistés he considered one in every seven applicants syphilitic. The evidences of syphilis in the bones, teeth, and skin (cicatrices), as accepted by Parrot, are not, however, yet generally looked on as conclusive. For my part, I must confess that, after careful inquiry and examination in my ten cases, I have been unable to trace any syphilitic causation. The ages of these cases, I ought to mention, ranged between one and

that the former occurs for the most part in gouty persons or such as are members of gouty families, it seemed to me no unfair inference that the precisely analogous tumour in the fibrous sheath of the corpus cavernosum of the penis was in all likelihood due to the same diathesis. The patient had also been treated, not long before this, for "rheumatic gout" of the right elbow. This opinion of the similarity in kind, and therefore probably in origin, of the two little tumours I communicated to the patient's medical attendant. Shortly afterwards on reading Sir James Paget's essay on "Gouty Affections of the Urinary Organs" (an addition in the last edition of his clinical lectures and essays), I found the following passage, which seemed to verify my view of the case:—"The maintenance of gleet in connexion with gout and other constitutional diseases is the more important because of the tendency to the production of stricture which is associated with them, and which, but for them, would be, I believe, a very rare consequence of gonorrhœa. In gouty persons the production of fibroid tissue, thickening and contracting the outer layer of the urethral wall, and thus producing stricture, seems to be a process of the same kind as the thickening and contraction of the palmar fascia of which I spoke in the last lecture. Or it may be more nearly compared with that very troublesome and generally gouty thickening and hardening of portions of the fibrous sheath of the corpus cavernosum, which produces distortion of the penis in erection, and sometimes frightens with fright of cancer. Tough bands or lumps of such fibroid tissue may be felt on either side, or more commonly, on the dorsum of the penis, or in the septum; and because they will not yield, as the rest of the structures do, to the erecting pressure of the blood, they hold the penis rigidly bent on them, as in a chordee." In the case I have described two of these three ailments are present at once in the same individual—a strong confirmation of the view that they have a common constitutional origin. It is well to add that the disease here described must be distinguished from gummy tumour of the corpus cavernosum, and also from tumours due to "the deposition of plates of calcareous matter in the corpora cavernosa, one or both, particularly in the fibrous sheath, a condition analogous to atheroma of arteries." (Van Buren.) So far as I am aware I have not met with either of these ailments.

CASE 2. *Hydrocele of the Tunica Vaginalis, in which the Fluid was of Milky Whiteness.*—I was asked to see Mr. N——, a gentleman somewhat over thirty years of age, in February, 1879, with the view of tapping and injecting a hydrocele of the left tunica vaginalis, with which he was troubled. The history of the case was as follows. He had been resident in India for some years, and while there became affected with double hydrocele. Both collections of fluid, after attaining a considerable size, were tapped and injected with tincture of iodine. He is not aware that any unusual character was observed in the fluid removed. The operation was unsuccessful, and after the lapse of some time it was repeated. This second operation also promised to be unsatisfactory in its issue, but in three months afterwards, he having in the interval returned to this country, the hydrocele of the right side, which had been very gradually decreasing, finally absorbed and became cured. That of the left side remained stationary and of large size. On tapping it I was surprised to find the fluid of milky whiteness. It might, indeed, have passed for a sample of ordinary cow's milk slightly diluted with water. I threw into the tunica vaginalis two drachms of the tincture of iodine of the old Edinburgh Pharmacopœia, with the usual satisfactory result. In about three weeks the hydrocele was entirely cured. Under the microscope the fluid showed no trace whatever of spermatozoa, and the whiteness was seen to be due to the presence in great abundance of fatty matter. Chemical analysis revealed, in addition, slight traces of albumen and sugar. I may quote from Mr. Curling's work on "Diseases of the Testis" the following paragraph in reference to similar cases:—"Fluid exhibiting the appearance of milk has in some rare instances been removed from the tunica vaginalis. M. Vidal (de Cassis) describes the case of a middle-aged man with tumours of the scrotum like hydrocele, except that they were not transparent. On tapping one he was astonished to find the fluid which escaped milky white. The fluid from the other side presented a similar character. Vidal alludes also to another case recorded by Sichel. Sir William Fergusson tapped a hydrocele of a German aged forty-two thrice in twelve months, and each time drew off fluid resembling milk. The fluid was exhibited at the Pathological Society, and was carefully examined by Dr. Harley and Mr. Mason, who found that the milky whiteness was due simply to the presence of fatty matter. No spermatozoa were detected in this specimen, nor in the fluid removed by Vidal. The fluid had the characters of the chylous liquid which had been found in the urine, and in the cavity of the abdomen, and probably resulted from obstruction to the lymphatics, or to an escape of their contents. (The intermixture of fat globules in the fluid of hydrocele is supposed by Klebs to result from fatty degeneration of endothelial cells). Vidal applied to his case the ill-chosen term of 'galactocele,' but as the fluid does not possess the characters of milk, this term is likely to mislead. The milky appearance being constantly diffused cannot well be mistaken for the opalescence of the fluid in encysted hydrocele, as in the latter the spermatozoa sink in the fluid and form a whitish sediment" (page 101). I may add that no one, as Mr. Curling here states, who has met with cases of spermatocele (encysted hydrocele of the epididymis) could possibly confound the fluid of such with that now under discussion. The opalescent turbidity of the one closely resembles cocoanut milk (Curling), while the complete whiteness of the other makes it hardly distinguishable from ordinary cow's milk. Moreover, I found the fluid in my case became denser in its upper part when allowed to stand in a vessel, a veritable kind of cream tending to form, while exactly the reverse is the case with that of the spermatocele from the subsidence by gravity of the spermatozoa.

CASE 3. *Spermatocele, containing forty-six fluid ounces.*—A man, fifty-eight years of age, was admitted into the Royal Infirmary on Dec. 14th, 1880, with a fracture of the left fibula. It was found that he also had a very large hydrocele of the right side of seven years' duration, which had not as yet been interfered with in any way. The skin of the abdomen was so dragged down by the weight of the tumour that the orifice of the prepuce alone marked the situation of the penis, which was otherwise entirely hidden. I could feel, and even detect by sight, the situation of both testicles, the right being at the bottom part of the tumour and rather in front, while the left was pushed up towards the left inguinal canal. After a few days he consented to my proposal to operate, and I did this on Dec. 21st. As soon as the fluid began to flow we were able to recognise the nature of the case by its slightly turbid and opalescent character. A drop, placed under the microscope, was seen to teem with very perfectly formed spermatozoa. The fluid measured forty-six ounces, and by the next day, having been left at rest, had separated into a thick, whitish sediment, with comparatively clear fluid above. I injected about two drachms and a half of the old Edinburgh Pharmacopœia tincture of iodine with the best possible result.

(To be continued.)

ON THE

CIRCINATE ERUPTION OF THE TONGUE,

CALLED "ETAT LICHENOIDE" BY GUBLER, AND "LA SYPHILIS DESQUAMATIVE DE LA LANGUE" BY PARROT.

BY COLCOTT FOX, M.B.LOND., M.R.C.P.,

PHYSICIAN FOR DISEASES OF THE SKIN TO THE WESTMINSTER HOSPITAL, AND PHYSICIAN FOR OUT-PATIENTS AT THE VICTORIA HOSPITAL FOR CHILDREN.

THE condition to which I wish to redirect attention is an uncommon one in my experience in this country; for although I have for the past three years been assiduously on the look-out for it, I have met with only ten cases, and six of these presented within a short time of one another in the latter half of the year 1883. I have here noted down what has so far been observed in regard to this mysterious affection, in order that those who come across it may help to throw light on its true significance.

History.—Gubler, in the "Dict. Encyclop. des Scien. Méd.," première partie, tom. x., p. 234, 1869, art. "Bouche," wrote a very brief description under the name, "état lichénoïde," which he applied provisionally so as not to prejudge the question of its nature, and because its aspect recalled the form of the thallus of certain lichens. He stated that he had seen many cases. In 1872 M. Bridou, interne

of the Hôpital Ste. Eugénie, wrote an excellent thesis on it, under the title "Sur une Affection innominée de la Muqueuse linguale," or "Etat tigré de la Langue," founded on the observation of five cases. He showed that the affection was familiar to most of the physicians at the children's hospitals in Paris, such as MM. Barthez, Bergeron (Remarks at the Soc. Méd. des Hôpitaux, 1864), Labric, Archimbaud, and at the Hôpital St. Louis, to Lailler, who noted it in 1860. Bridou, however, claims priority for an article entitled "Contributions to the Study of Desquamation of the Tongue," by Dr. Santhus de Hadamar, in the *Journal des Maladies des Enfants de Behrend et Hildebrand*, Sept. 1854. The first publication in England was a description of two cases by Mr. Arthur Barker in the Pathological Society's Transactions for 1880, vol. xxxi., and in the discussion thereon it was mentioned that Sir James Paget had noticed a case of "ringworm" of a man's tongue (Fairlie Clark on Diseases of Tongue), and that Mr. Marcus Gunn had sketched a similar condition on a child's tongue at Moorfields Hospital. Following closely on Mr. Barker's paper came an elaborate account by Professor Vanlair, of the University of Liège, in the *Revue Mensuelle de Méd. et de Chir.* of Jan. 10th, 1880. He selected for description from many cases he had observed three—viz., an old lady of sixty-six years, an adult, and a child. Lastly, Professor Parrot contributed two communications to the *Progrès Médical* of 1881, the second one in answer to an inquiry of Vanlair's, and Mr. Clement Lucas demonstrated the affection in a syphilitic child at the Royal Medico-Chirurgical Society in April, 1881. Caspary and Unna have also written on the subject.

Description.—In Parrot's words the eruption is a circinate desquamation, characterised by rapid evolutions and repetitions. It consists of one or several round raised whitish patches, reaching to the size of a lentil, which enlarge peripherally like a body ringworm, and spread towards the centre and root of the tongue. These patches are thus soon converted into rings with three zones—viz., an external raised, yellowish white, advancing bordering or fringe of heaped-up desquamating epithelium, and closely following this a red zone recently desquamated, and in the centre again a red glazed area over which the epithelium is already reforming. All the central part within the white border is of a red tint, easily distinguishable from the normal red colour of the tongue, and is studded with fungiform papillæ, often unusually prominent. As the rings continue to spread they quickly get broken up into curved or wavy raised white lines, and may cut another to form various patterns which are familiar to us in connexion with various affections of the skin. Each ring lasts in some part of it from about five to six days, as a rule (Parrot), and before it has died a second and a third, and still others, may follow from the borders of the tongue towards the centre and base, where they can be no longer traced. The rapidity of spread varies, however, for sometimes the rings extend very slowly, and at other times very rapidly. On the whole the rapid evolution is as striking a feature as it is in some of the ringed phases of erythema multiforme. As to the size the rings may attain, Bridou estimated that any segments seen rarely belong to circles more than eight to ten millimetres in diameter. The site occupied by the eruption is another curious feature, for almost invariably (Bridou, Parrot) the rings start from the upper surface of the tongue near the sides and tip. Vanlair says it attacks indifferently the base and tip. In my experience the rings start only occasionally from near the raphe and centre, and it tends to be a bilateral affection. Bridou says the inferior surface and sides of the tongue are not invaded, Parrot says rarely, and Barker noted the rings to occasionally creep over the borders but not to attain the floor of the tongue or buccal mucous membrane. It follows from this that the white patches arising near the borders of the tongue enlarge into spreading segments of circles. Vanlair's experience, however, is that the rings may extend to the under surface, and then he says their centre is livid and the spreading edge red, instead of white, and so less conspicuous, because of the absence of filiform papillæ here. As for subjective symptoms, they are but slight; the sensations of taste and touch are unimpaired, but occasionally there is more or less itching present and dribbling of saliva. The commencement of the eruption is obscure, and nearly always unheeded or unnoticed by the parents, and its duration equally uncertain. The subjects of it appear to be liable to constant repetitions, or it may remain absent for several months or years till excited by an illness. There is no doubt that it is essentially an affection of childhood, and Parrot in thirty-one cases met with it six times in the first six months, nine times in the second six months, and seven times in the second year, making twenty-two cases in the first two years of life, against nine cases from two to six years of age. It has been seen to recur up to eight years old, but after a time the recurrent tendency appears to die out. It is now and again met with, however, in the adult, for Lailler saw it in a man of twenty, Bergeron in one of his internes during convalescence from enteric fever, Sir James Paget in a man, and Vanlair in ladies aged twenty and sixty-six respectively. Gubler is the only observer who declares that it may be habitually present in some.

Etiology.—As to sex, Vanlair thinks it occurs mostly in females, but has not observed heredity. Gubler, however, believed it to be hereditary, and stated that he had seen entire families affected. In a case of Bridou's the mother recognised the affection as one she had also suffered from in childhood, and I have had a like experience with him in meeting with it in a brother and sister. Anatomical evidence points, in Professor Vanlair's opinion, to the fact that the affection is a subacute papillitis of the filiform papillæ, and that the white patches are formed by the proliferation of epithelium, which subsequently exfoliates copiously. In this process these papillæ are sometimes destroyed, and in such a spot the rings no longer form. M. Martin, the chief assistant in Parrot's laboratory, found, from the microscopic sections of three tongues, that the derma was the chief seat of the disease, the epithelium was thickened and swollen, the corneous layer cells increased in volume, the rete so also and actively proliferating, and the papillæ and adjacent derma contained many lymphoid corpuscles around the vessels. In Paris, at the time Bridou wrote, nothing was definitely known as to its nature, but there was a general agreement to exclude a parasite, and a constitutional vice such as herpetism, dartre, or syphilis, and in this view Bridou and Vanlair agree. All observers allude to the coexistence of dyspeptic troubles, and hence the surface of the tongue, on which the rings form, may be the seat of various degrees of inflammation and furring, or on the edges of ulceration. Lailler and Archimbaud connected the reappearance of the rings in two infants with the outbreak of any illness; Bergeron, Gubler, and Vanlair all noticed gastro-intestinal disturbance, and this has also been my experience. These facts lend some support to Mr. Barker's view of the reflex nervous causation of the patches. Unna considered the affection to be a trophoneurosis.

The aspect of the rings is very suggestive of ringworm, and in four of my cases tinea tonsurans was present, and in one infant in addition ringworm of some finger-nails, which were constantly being sucked. Mr. Barker is the only observer, however, who has found the trichophyton fungus in the tongue, and he only in one case, and on one occasion, so that he discards the parasitic theory of causation. I have repeatedly examined all parts of the affected tongues with great care and never could find any trichophyton fungus. Scrapings show corneous epithelium singly and in groups, and as casts of the filiform papillæ, rete cells, saliva corpuscles, and invariably the thallus filaments and spores of the leptothrix buccalis. Vanlair figures this alga, and shows that Robin regarded what are really the spores as a granular detritus serving for the nutrition of the threads. Large aggregated masses of these spores are always met with, and often surrounding some foreign body, which Vanlair thinks are altered vegetable fibre, but which I feel certain is almost invariably an epithelial cast of a filiform papilla. To show that this alga does not stand in any causal relation to the eruption, I may say that I have examined many tongues, both of children and adults, and always found plenty of the leptothrix present.

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five years. The eruptions of hereditary syphilis may occasionally extend to the tongue, just as in acquired syphilis, though, I think, less frequently in the former case. In acquired syphilis, again, circular eruptions have been described on the tongue, but nothing approaching in character the eruption now under discussion is known.

Postscript.—Since this note was written and as it goes to press I see the notice of publication of a thesis by M. Lemonnier on the subject, in which he combats the syphilitic origin of the affection.

Harley-street, W.

SYPHILIS AND MERCURY.

By J. ROCHE, M.D.,
H.M.'S BOMBAY MEDICAL SERVICE (RETIRED).

IN September, 1882, a gentleman consulted me on account of a painful swelling of the right leg, the skin being much discoloured and ulcerated in several places. He said that he had been in London, where he had walked a great deal, being on his feet till late at night. Some six years previously he contracted syphilis; this healed rapidly, but was followed by a lichenous rash, which was quickly remedied by a course of iodide of potassium in bitters. No other constitutional symptoms showed themselves until the autumn of 1882, when the skin of the right leg became darkish-brown in colour, and the veins puffy, and he experienced a sense of uneasiness and weight in the limb; standing and walking for any length of time aggravated the symptoms. Small indolent ulcers appeared below the knee to the inner side on the skin, and around the ankle-joint. When I examined him the whole leg from knee to ankle was swollen and discoloured, especially in the lower third, where there was slight pitting, with disappearance and speedy recurrence of colour, to the touch. There were several small gouged-out ulcers, discharging sanious matter, scattered over the leg, but more thickly aggregated at the inner ankle; a few were of the irritable variety. A description of one will suffice for all. 1st. A bluish puffiness was discernible, which in a few days became scarlet, tender, and prominent. 2ndly. Either spontaneously or on pressure, a sanio-purulent discharge issued, leaving a punched-out, sluggish-looking sore; after it had been dressed for some days it healed by the edges falling in rather than by granulation, leaving a peculiar mottled surface. All the other parts of the body were perfectly healthy as far as could be seen by investigation. The countenance was pale and delicate, and the crown of the head was bald, though the patient was under forty. He had been obliged to wear an elastic stocking for some time, and had been accustomed to dress the sores with white precipitate, iodoform, and calamine ointment. He went out at night, and could remain up late tolerably well; his habits were strictly temperate, though not a total abstainer. He was ordered the following mixture: iodide of potassium, one drachm; syrup of iodide of iron, two drachms; tincture of iodine, forty minims; infusion of quassia, twelve ounces; one ounce to be taken three times a day; and a dressing composed of elemi and carbolic acid. He was soon affected with iodism, and his stomach rebelled against the mixture, nor did the ulcers progress satisfactorily. He was then ordered quinine, perchloride of iron, nitro-muriatic acid, and quassia, and after a short time cod-liver oil and iodide of iron were tried. The stomach could not tolerate these drugs. Astringent lotions of acetate of lead, alum, decoction of oak-bark, and extract of catechu were used topically, with no satisfactory result. Some ulcers healed rapidly, but in parts of the leg where there existed the puffy stage the formation of a sore seemed to be hastened. He was ordered an ounce of the following mixture three times a day: bichloride of mercury, one grain; iodide of potassium, one drachm; tincture of cinchona, one ounce; water to twelve ounces. The sores were stimulated with citrine ointment, and the leg from the ankle to the head of the tibia enveloped with cloth well covered with mercurial ointment. Improvement at once set in, and continued for more than a week; thence he became weak, night-sweats supervened, and there was uneasy pain in the lower part of the limb on his retiring to sleep, so much so that he was constrained to leave his bed and bathe the limb in cold water, and more than once had recourse to the application of a wet sponge, applied like a poultice, to induce or prevent the disturbance of sleep. The following mixture was ordered instead of the previous one: solution of arsenic, forty minims; iodide of potassium, sixty grains; tincture of larch, two drachms; compound decoction of sarsaparilla, ten ounces; one ounce to be taken three times a day. The dressing was changed to sulphate of iron and elemi. The appetite and general condition improved, but there was no apparent benefit conferred on the seat of the affection. Again he was ordered bichloride of mercury, one grain; tincture of cinchona, half an ounce; dilute nitro-muriatic acid, one drachm; water to ten ounces; one ounce to be taken three times a day. In about a week the night-sweats returned, and, though there was evident improvement in the ulcers, some still kept bad; and the pain at night was racking, exhausting, deep-seated, and of a throbbing character. The swelling around the ankle and on the dorsum of the foot increased, the return of the displaced colour by pressure was immediate, and the œdema caused by long standing did not abate. As the joint was very tender at the ankle, leeches were applied, and the patient rested for some days. They relieved the pain for a short time. Cod-liver oil, solution of potash, and bichloride of mercury, after Jeannel and Maunsel's formula, and at one time highly approved by Champonier, were administered, but the stomach retained them with difficulty. The air-bath was employed, with three grains of calomel at each sitting, over a month, and, like every other attempt with mercury, there was improvement in the early days, but later on came night-sweats and other suspicious signs. In fact the patient was not improving satisfactorily; he lost flesh, his appetite was bad, rest disturbed, and constant pain, which increased at night. From the commencement of the treatment, for a period of six months, he took about two glasses of sherry or two glasses of Guinness's stout per diem.

I then became apprehensive of my patient's condition, as walking was almost impracticable; the joint seemed involved, and also the periosteum of the lower and anterior inner part of the tibia. I recommended him to consult an eminent surgical authority in Dublin, which he did, and, I am glad to say, with excellent results. The prognosis pronounced was most favourable. The treatment was red iodide of mercury, salicylic acid ointment, and strict teetotalism. The improvement was speedy; but, as on former occasions with similar drugs, the beneficial results seemed marred in a week by the cachectic night-sweats, &c. However, after some days' intermission, the mixture was resumed, and when the debility, loss of appetite, and night-sweats returned, there was another intermission. After about a month the improvement was manifestly enduring: the discolouration disappeared, the swelling subsided, the pain at night became less, the power of walking returned, the appetite improved, and the patient could tolerate the medicine. After some months, and when nearly the whole of the ulcers were closed, and the limb reduced to its natural condition, the same eminent surgical authority ordered the patient to Aachen, where he underwent a month's course of Dr. Brand's treatment—viz., almost daily rubbing-in of mercurial ointment, every other day warm baths, and the copious imbibition of sulphur spa water. He is now completely well. He attributes a marked advance to the injunction to abstain absolutely from alcohol and smoking, and he highly appreciates the experience which made him persevere with the mercury after a few days' intermission on the manifestation of cachexia. He was slightly salivated and touched in the gums at Aachen.

There is no doubt in my mind that mercury is the sheet-anchor in syphilis. I believe the reason of its action is expressed by "similia similibus curantur," or rather "quæ similia sunt in similia loca agunt," more than by any other adage in medicine. Mercury has its sphere of action in the same place and manner as syphilis; attacks the same organs in somewhat the same relativity; it produces a similar fibrino-albuminous diathesis, and in excess or in prolonged use it produces similar degenerations and similar interstitial destruction of tissues and organs as syphilis. I venture to add it cures by supplanting the virulence of the syphilitic action by one amenable to control. I have witnessed a case of gummatous phthisis surprisingly benefited by a liberal allowance of spirits and eggs; yet the case above cited improved on an opposite course of treatment. I have not seen much advantage from iodide of potassium, and whilst my standing drugs for syphilis during my period of civil surgeoncy at Kotree and Hyderabad,

Scinde, India, were yellow wash externally for all sores, primary and secondary, and an internal mixture of one grain of bichloride of mercury, half an ounce of tincture of cinchona, and one drachm of iodide of potassium, to twelve ounces of water. I have found where malaria existed, and there were signs of the lungs, liver, or spleen being affected, apparent improvement to follow a mixture of quinine and chloride of ammonium, five grains of each, with dilute hydrochloric acid in infusion of chiretta, which is a popular remedy in India.

I may mention that I have found the natives of India, who are very shrewd observers, to prefer in several instances sal ammoniac and chiretta to quinine and acid in fevers attended with much pain in the limbs. They frequently asked for the black-looking mixture in preference to quinine where they had had both. In malaria and syphilis combined sal ammoniac is useful.

My experience would enable me to assent to the proposition that it is useless to draw a distinction between hard and soft sores; that a sore may be healed in a fortnight, and leave no local or remote sign of syphilis, and be followed after many years' immunity with necrosis of the palate; that a dead fœtus may be born to a diseased father, and the mother escape; but whether the semen of a diseased man, the blood, lymph, or pus of an infected subject, apart from the pus of inoculation, can impart the contagium, I have witnessed nothing to enable me to offer testimony in support or in opposition to the present general opinion.

Kingstown.

THERMO-TRACHEOTOMY.[1]

BY FRANK MARSH, F.R.C.S. ENG., &c.,
HOUSE-SURGEON TO THE STAFFORDSHIRE GENERAL INFIRMARY.

FEW operations are easier of performance on the dead body than that of tracheotomy, and oftentimes few are so difficult upon the living, and therefore the following remarks on the use Paquelin's thermo-cautery for that purpose may not prove uninteresting. Although of late highly recommended and frequently performed by leading Continental surgeons, notably by Poinsot, Bœckel, and Krishaber, no record of this operation has appeared, to my knowledge, in recent medical literature in England. At first sight it would seem to possess great advantages over the usual method with the scalpel, the bloodlessness of the whole proceeding proving attractive, especially to the timid operator. In a certain proportion of cases, I might even say a large proportion, the use of the cautery is obviously inadmissible, time not being given for its preparation, even were it at hand, as in spasm of the glottis from whatever cause, acute obstruction from lodgment of foreign body, acute œdema, and in all those cases in which the patient is at the last gasp before the surgeon is summoned. Unfortunately in not a few of these instances one is frequently too late even with the knife. It is also unsuitable for those cases where tracheotomy is performed for the purpose of extracting a foreign body in the air-passages, the immediate union of the wound afterwards being a desideratum if the attempt has proved successful. On the other hand, it would seem to be especially indicated in cases of diphtheria, or in syphilitic affections of the larynx, where as a rule the process of asphyxia is slow, and where the eschar to a great extent would prevent the infective process spreading to the wound. The disadvantages peculiar to this operation are: the hard and hot eschar on the surface of the wound, preventing the finger being used as a guide during the process of the operation; the inflammatory action in the parts around during the separation of this eschar; the increased liability to secondary hæmorrhage from implication of arteries in the sloughing process; the large wound consequently formed; and the subsequent trouble from cicatricial contraction. All these drawbacks, with the exception of the last, are well illustrated in the following case.

Ada P——, aged six, suffering from diphtheria, was admitted into the detached infectious wards on the 10th of October last (under the care of Dr. Reid), with a view to tracheotomy being performed.

On admission there was great dyspnœa, very little air entering the chest. This increased so much the next few hours that immediate tracheotomy afforded the only hope, and I decided to give the cautery a trial. The disease being extensive, it was desirable to perform the operation as low down as practicable. The child had a short and fat neck, and the thyroid veins were much engorged owing to the partial asphyxia, material obstacles to begin with. Using a knife-shaped point, with a series of light touches (following Krishaber), keeping strictly in mid-line, and pressing forward the trachea as much as possible with the finger and thumb of the left hand on either side, the latter was at length reached a good inch from the surface, the whole proceeding being perfectly bloodless, and, so far as that was concerned, eminently satisfactory. It was almost impossible to tell the position of the trachea in the wound by tactile examination during the process, and difficult to recognise it by sight among the seared parts; the increased resistance and tendency of the cautery to roll off into the loose areolar tissue around being the chief indications it was reached. This tendency proving an obstacle to opening it, a scalpel was used for the purpose, and with some little difficulty, on account of the depth of the trachea from the surface, a bivalve cannula was introduced, over which a shield of wire, covered with two layers of gauze, was fixed, and, being occasionally moistened with oil of eucalyptus, kept the inspired air both aseptic and free from particles of dust, &c. The child immediately experienced great relief, and on the following day seemed much better, but on the third and fourth days the parts around were much swollen and inflamed, a source of much discomfort to the child. On the morning of the fifth day a severe attack of secondary hæmorrhage occurred, evidently from the right inferior thyroid artery becoming implicated in the sloughing process attendant on the separation of the eschar. This was stopped by pressure of lint soaked in strong tincture of perchloride of iron, but not before a good quantity of blood had passed down into the bronchi, the cannula having been removed by the nurse at the onset of the bleeding. This caused severe dyspnœa, the child being unable to expel the blood, and in spite of remedies death took place in about two hours afterwards.

This case, I think, fairly shows the difficulties and drawbacks to this method. With the knife there would undoubtedly have been a great amount of venous bleeding, but it would soon have ceased upon the re-establishment of free respiration; also the position of the trachea could have been defined during the operation, a matter of some import when deeply seated; neither do I think that secondary hæmorrhage would have occurred. Again, had the child lived there would have been the disfigurement from a large scar, and in all probability trouble would have arisen from the pressure effects consequent on the cicatrisation and subsequent contraction of an unnecessarily large wound. This also would have been avoided by the use of the scalpel. Now, in an adult with a fairly thin neck there is seldom any venous or capillary hæmorrhage of consequence, and on this account, therefore, the cautery would hardly be needed, and it would prove but of little avail in checking bleeding from an artery of any magnitude, should one be met with, as occasionally happens, when, for instance, an additional thyroid artery is present; indeed, it would only increase the difficulty of applying torsion or ligature by the consolidation of the parts around. In adults it might be of some use in keeping the wound free from septic or other infection, the subsequent sloughing process, on account of the greater space, not to be so much feared as in the case of a child. Taking, however, into consideration all the above facts, the balance of evidence appears to me by far in favour of the older method with the scalpel, especially for children, and without detracting from the merit of a most valuable instrument, I would very strongly urge its unsuitability for the performance of tracheotomy.

[1] Paper read before the Staffordshire Branch of the British Medical Association on Feb. 28th last.

CHARING-CROSS HOSPITAL.—A conversazione was held at the Charing-cross Hospital Medical School on Thursday, the 1st inst., on the occasion of the opening of the summer session. The building was tastefully decorated, and there was a large number of interesting objects exhibited. The company were received by the Treasurer, Dr. Julius Pollock, and the Dean, Dr. Mitchell Bruce. Besides the members of the staff, which was well represented, there was a goodly assemblage of guests, amongst whom were, Sir William Bowman, Sir Richard Pollock, Sir Joseph Fayrer, Sir Guyer Hunter, Mr. Campbell, M.P., and others.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nullaautem estalia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GUY'S HOSPITAL.

LIPOMA OF PALM OF HAND SIMULATING GANGLION; EXCISION; WOUND DRESSED WITH TEREBENE AND OIL, AND WASHED WITH IODINE WATER; RECOVERY WITHOUT SUPPURATION; REMARKS.

(Under the care of Mr. BRYANT.)

FOR the report of the following case we are indebted to Mr. Heatherley.

David R——, aged forty-nine, a farmer, was admitted into Job ward on Jan. 15th, 1883. He had generally enjoyed good health, excepting occasional attacks of rheumatism. He was kicked in the hand fifteen years previously by a horse, and seven years ago a swelling appeared over the fifth metacarpal bone. A week later another swelling appeared in the middle of the hand, and some time after another at the root of the thumb. These grew together, forming one swelling in the palm of the hand. The patient poulticed it, and it burst, when about a drachm of blood came away. A sinus remained, and the mass continued almost unchanged. Two years ago another swelling appeared upon the dorsum of the hand between the index and third fingers.

On admission a bossy swelling existed over the inner side of the ball of the thumb, which extended outwards in the cleft between the thumb and forefinger, three inches by one inch, and was raised half an inch above the surface. The swelling over the lower part of the palm over the metacarpal bones was four inches wide from side to side and two inches from above downwards, and was raised about half an inch above the level of the rest of the palm. In the centre was a deep depression. The swelling on the dorsum of the hand was at the cleft between the index and middle fingers, one inch in diameter each way, and raised about half an inch. There was slight fulness between these fingers, and their first phalanges were kept separated three-quarters of an inch. A feeling of fluctuation was very distinct all over the swelling, and from the swelling on the dorsum to that in the palm even to the ulnar side of the hand. The skin was movable over the swelling, except at the depression in the palm, and of a pinkish hue. No pain or tenderness. There was sensation of cracking, as of loose bodies being displaced, when pressure was made between the swelling on the dorsum and that in the palm. No swelling of the forearm in front above the wrist. The patient was able to flex the fingers and thumb freely on the swelling in the palm. The case was diagnosed to be one of diffused ganglion.

On Feb. 3rd an incision was made along the palm of the hand over the fifth metacarpal bone, when some fat immediately protruded, showing the swelling to be a lipoma. A cross incision was therefore made to the base of the thumb, and continued along the space between the second and third metacarpals. The whole of the tumour was then enucleated, except at the root of the middle finger, where the growth had to be dissected from the skin. The tumour was bound down to the palmar fascia in several places, and extended *beneath* the flexor tendons. The fat in the swelling on the dorsum was more lobulated, and the tumour here was removed without any further special incision. None of the digital nerves were divided. The superficial palmar arch was divided, and both ends twisted on the outer side. There was very little hæmorrhage. The wound was washed out with iodine lotion, a drainage-tube inserted, and the edges of the skin kept in position by catgut sutures. The arm was then put upon a zinc splint, two damp sponges were placed in the hollow of the hand to maintain the parts in apposition, and the hand bandaged. On the 5th the hand was dressed, and it looked healthy. Another drainage-tube was placed in the wound. On the 6th it was found that no serous discharge came from the tubes. On pressure a little blood-stained serum alone exuded.

By March 1st the hand had completely healed; there was very fair movement in all the fingers, and good sensation, except at the distal end of the middle finger. On the 6th the patient was discharged.

Remarks.—So far as the hand was concerned this case simulated very perfectly a case of multiple ganglion connected with the theceæ of the tendons, with foreign bodies in the bursæ, and the apparent fluctuation of the fluid and crepitating sound which was to be detected between the palm and the swelling on the dorsal surface of the hand encouraged this view. At the same time it was a point to be observed, and wondered at, that the swelling had not encroached upon the forearm beneath the annular ligament, as is generally met with in ganglion. The absence of this symptom indeed ought to have been enough, perhaps, to suggest that the case was not one of ganglion, but possibly of lipoma. A drawing of this case will be given in the forthcoming new edition of Mr. Bryant's book on the practice of surgery.

FRACTURE OF TEETH IN THE UPPER AND LOWER JAW ON THE LEFT SIDE, WITH DEPRESSION INTO ALVEOLUS OF THE LOWER TEETH ON THE RIGHT SIDE, WITH FACIAL PARALYSIS; PROBABLY FRACTURED BASE OF THE SKULL; RECOVERY.

For the following notes we are indebted to Mr. Hore.

J. H——, aged seventeen, a porter, was admitted into the Accident ward on May 20th, 1882. He had fallen from the side of a steamer, striking his chin against the edge of the quay, and then falling into the water. He was insensible for some few minutes afterwards.

On admission he was quite sensible. There was a lacerated wound just under the symphysis of the chin. The left lower canine teeth were quite loose, with a corresponding portion of the alveolar process. No other fracture of the jaw was then detected. There was bleeding from the left ear, which continued all day. Pulse and temperature normal. Milk diet.

May 21st: Wound sealed with compound tincture of benzoin. The bleeding from the left ear ceased. Paralysis of left facial marked.—22nd: The face is rather swollen, causing some impairment of the movement of the jaw. Breath is very foul.—23rd: To-day it was noticed that the mucous membrane of the *right* side of the lower jaw was very much swollen, and all the teeth from the canine (two bicuspids and two molars) had sunk below their natural level, so that their cusps were on a level with the necks of the other teeth.—24th: The loose canine came out to-day, leaving the stumps in the jaw. Swelling of face entirely disappeared.—26th: Wound in chin began to bleed, but this was stayed by a pad. The teeth that had been driven down into the jaw were elevated. One bicuspid and two molars of the *left* upper jaw were split vertically; the outer halves only were removed.—31st: Breath still very fetid. Wound healthy.

June 8th: Teeth (two bicuspids and two molars) in the left lower jaw still quite loose.—24th: Swelling over the submaxillary gland opened through the old wound, when a considerable amount of pus escaped.

July 17th: Swelling re-formed.—24th: A small piece of alveolus came away this morning from the right lower jaw, and the patient says small pieces have come away from time to time.

Aug. 24th: The patient came to the hospital. He has paralysis of the left side of the face, not very marked, but quite noticeable, the face being drawn up on the right side. He can whistle. Is slightly deaf with the left ear. The teeth keep their level very well, but are hardly any firmer than when the patient left the hospital.

Sept. 4th: No deafness; no paralysis. He is still unable to bite anything hard.

Jan. 1883: The teeth which had been elevated were removed, as they were quite loose; cannot bite anything hard yet. Some months later the boy was well.

Remarks.—This case of fracture of the lower jaw, and absolute depression of the teeth into the bone down to the level of the gum is very rare, if not unique. Mr. Bryant knows of no such recorded case.

WEST DERBY UNION HOSPITAL, LIVERPOOL.

HYDATID CYST OF RIGHT PLEURA; EVACUATION.

(Under the care of Mr. H. T. GROOM.)

LYDIA B——, a delicate-looking girl, aged fifteen years, was admitted on August 1st, 1882. Her mother stated that her daughter had had good health till March, 1880, when she was supposed to have caught cold, suffering from pain in the

left side, shortness of breath, slight attacks of shivering at night and gradual emaciation. These symptoms increased in severity till admission, although the girl had been under medical treatment from the commencement of her illness. The following particulars were also obtained: there had been no cough, no hæmoptysis, no disturbance of the alimentary canal, no jaundice or other symptom pointing to any affection of the liver at any time. A fortnight before admission the right side of the thorax was aspirated, when three pints of fluid were drawn off, the character of which led to a diagnosis of empyema, for the further treatment of which the patient was sent into hospital. But little relief followed the removal of the fluid, pain now being felt for the first time on the right side.

On admission the patient was emaciated, pale, and of a sallow complexion, but with the conjunctivæ clear and untinged. She was unable to lie down, and slept sitting up in bed with her head resting on her hands. She complained of severe pain in the right side, especially at the back of the thorax. The pulse was 84; the respiration 32; the temperature was normal, and continued so till after paracentesis. Examination of the chest showed that on the right side the whole surface was suffused with a bright-red blush, with dilated superficial veins, accompanied with increased warmth and great sensitiveness to pressure. There were present all the signs of fluid distending the right pleural cavity, with very marked bulging of the intercostal spaces from the clavicle to the diaphragm. The right side of the chest round the mammæ measured fourteen inches and a half; the left side thirteen inches and a half. The left lung, except for increased loudness of the vesicular murmur, was normal. Auscultation of the heart showed that it was pushed over to the left side, the apex beat being felt half an inch below and an inch outside the left nipple. The liver extended half an inch below the margin of the ribs, but otherwise it and the other organs of the abdomen were quite normal.

On Aug. 4th the right pleural cavity was opened, with antiseptic precautions, by a single incision an inch and a half in length through the sixth intercostal space, an inch in front of the axillary border of the scapula. Through this incision escaped forty ounces of inodorous, slightly turbid, amber-coloured fluid, containing much rusty-coloured flocculi, together with numerous nearly colourless spherical cysts, varying in size from a pea to a marble, and greatly resembling white grapes in appearance. Within some of the cysts could be seen smaller cysts floating. The rusty-coloured flocculi, and a considerable quantity of oily matter that floated on the surface of the fluid removed, were attributed to fatty degeneration of the walls of some of the cysts, and in corroboration of such an origin there subsequently escaped collapsed cysts which had undergone fatty degeneration. The finger was passed through the opening into the chest, where many cysts floating in fluid were distinguished, and the upper surface of the diaphragm explored, but found smooth and natural as far as the finger could reach. 11 P.M.: Pulse 92; respiration 26; temperature 98·8°.—5th: Slept well during the night, lying back with head on pillow. Pulse 104; respiration 26; temperature 98·4°. On removal of dressings ten ounces of similar fluid to that of yesterday escaped, and about thirty cysts came away on washing out the chest with a weak solution of carbolic acid. 11 P.M.: Pulse 100; respiration 28; temperature 99°.—6th: Pulse 100; respiration 28; temperature, morning, 99·4°; evening, 101°.—7th: Temperature 101·4°. About 100 more cysts washed out. On the following days a great number of cysts continued to escape, some of them considerably larger than those hitherto seen, the fluid discharge from the chest becoming purulent, and the temperature that of mild hectic.—22nd: Two large pieces of cyst wall presented at the opening, and were drawn out, the larger measuring five inches by three, and about a line in thickness. They were slightly yellow, translucent, and of hyaline appearance, tough, and could be separated into two layers. Attached were one or two apparently collapsed cysts. These were evidently portions of the original mother cyst of an hydatid tumour, for afterwards on scraping the inner surface and examining under the microscope scolices were seen.—27th: Two more pieces of cyst wall corresponding to the former were drawn out of the chest, one piece measuring two inches by one inch. Feeble, distant breathing heard at apex of right lung; apex of heart felt half an inch outside nipple. Both sides of chest now measure thirteen inches and a half.

After this date, a few more cysts made their appearance, the case assumed the character of an empyema after paracentesis, and the patient improved in appearance and gained in flesh. She was discharged at her own request on May 9th, 1883, although a small amount of thin purulent fluid daily escaped from the sinus. The patient was next seen and examined at her home, on March 6th, 1884, when it was found her general condition had not improved since her discharge from hospital. The mammæ remained undeveloped, the catamenia had never appeared, and although seventeen years old, she looked like a girl of thirteen. The right side of the chest had fallen in, producing a considerable lateral curvature of the spine and drooping of the right shoulder. The sinus was still open and discharging daily about a cupful of thick yellow pus. The left side of chest now measured fourteen inches, the right only twelve inches. The apex beat of heart was still felt half an inch outside nipple. The right lung was now resonant and air entered in front and behind, except at the base and near the axillary region. The liver appeared normal, and as far as could be discovered, the patient was now free from hydatids.

Remarks.—The absence of cough and of any symptom pointing to the lung itself, together with the healthy condition of the liver, led to the belief that this was a case of a solitary hydatid tumour, which had formed in the pleura, and that its subsequent rupture here had caused the extreme distension of the whole right pleural cavity, without exciting purulent inflammation, is shown by the absence of any elevation of temperature on admission and the character of the fluid removed on paracentesis.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Enlargement of Ovaries.—Mediastinal Tumours.—Supposed Actinomycosis.—Cast from Trachea.—Lardaceous Suprarenal Capsule.—Multiple Exostoses.—Myofibroma of Stomach.—Cartilage containing Tumour of Scalp.—Malignant Lymphoma of Abdomen.—Cystic Tumour of Spleen.

THE penultimate meeting of the session of this Society was held on Tuesday last, Mr. J. Whitaker Hulke, F.R.S., President, in the chair. There was an exhibition of no less than seventeen card specimens.

Mr. BOWLBY read the report of the Morbid Growths Committee on Dr. Norman Moore's specimen of Enlarged Ovaries in connexion with Cirrhosis of the Liver. A general increase in all the tissues of the ovary was found. The cortex was denser than normal; this was due to an increase of fibrous tissue. The greater part of the rest of the ovaries was composed of cells similar in shape and size to the nuclei of involuntary muscular fibre. These were imbedded in a homogeneous matrix. The enlargement was thought to be more of the nature of hypertrophy than chronic inflammation or cirrhosis.

Dr. SAMUEL WEST exhibited three specimens of Tumour of the Lung. 1. A youth, aged eighteen, who had had his thigh amputated for osteo-sarcoma some months previously, came under observation suffering from pain in the chest, dyspnœa, and palpitation; about fifty ounces of blood-stained fluid were removed from the left pleura by aspiration. At the necropsy several massive tumours were found in each lung, soft and spongy on the surface, but very hard within. They were of the same nature—viz., osteo-sarcoma—as the original tumour of the leg. There were no secondary growths elsewhere, and the stump was healthy. 2. A man, aged thirty-nine, had been ill for a month when he came under observation with what appeared to have been pneumonia. Some effusion was found at the right base, but the removal of this did not bring much relief. On post-mortem examination, at the root of the right lung, surrounding the bronchi and vessels and compressing them, was found a mass of new growth extending into the lung substance along the course of the large bronchi. Microscopically, the growth was found to be scirrhous. 3. In a man, aged sixty-two, whose physical signs exactly resembled those of the last patient, the post-mortem appearances were similar, except that the tumour was of small extent, sending processes only a very little way

into the lung substance. As in the other case, there were œdema and inflammatory changes, which had gone on to the formation of a cavity. The tumour in this case was also scirrhous. These last two cases were instances of what were commonly called primary tumours of the lung. But this was a mistake, for they originated in the lymphatic tissue at the root of the lung, and only affected the lung by direct extension. They were distinct both from tumours of the lung substance and from mediastinal tumours. The former were very rare as primary, but common as secondary, growths. The first case was, in his opinion, one of secondary growth. The points in the last two cases were that the disease was nearly always unilateral, starting from the root and radiating inwards along the branches of the bronchi. All the structures at the root were compressed by it, and the result was that there were collapse and œdema of the lung, with inflammatory changes, often followed by breaking down of the lung substance, and the formation of cavities by a species of necrotic degeneration. These cavities were not, as was sometimes said, the result of the softening of cancerous nodules, and they contained only the products of lung tissue. The diagnosis, both from ordinary phthisis and from mediastinal tumour, was often very difficult.—Mr. HULKE said that an explanation was wanted as to how a new growth could spread up the lymphatics against the direction of the lymph stream.—Dr. NORMAN MOORE thought that the last two cases might come under the category of endotheliomata, and might have originated in the pericardium or pleura.—Dr. EWART referred to cases he had seen in which there were secondary nodules in the lung or pleura after mammary cancer. These illustrated the mode of spread of malignant disease by the lymphatics. In such instances an arborescent-like growth in the lymphatics could frequently be seen. He had met with specimens of sarcoma of bone in which the only secondary deposits were in the lungs. An interesting case of mediastinal growth which had reproduced itself in the lung was next narrated. It happened in a child, aged ten years; dyspnœa was the chief symptom during life; about two months before death consolidation was diagnosed in one side of the chest. At the autopsy a growth was found projecting into the right auricle in the form of a mushroom-like excrescence; there were nodules in the lungs, which were believed to be secondary to the growth in the auricle, thereby affording an illustration of the blood-vascular mode of dissemination of new growths.—Mr. BOWLBY said that in the first case it was a central tumour of bone with but few myeloid cells, and probably best termed a fibro-sarcoma. It ought not to have been considered very malignant, for the fibrous preponderated over the cellular elements. He doubted whether the term scirrhous could be applied to the primary growths shown. Certainly one of them merited the term endothelioma.—Dr. WEST, in reply, made mention of a case in which the whole of the pleura had become infiltrated with carcinoma.

Dr. FREDERICK TREVES gave an account of his case of supposed Actinomycosis. The patient was a man aged forty-six, a brick burner, who two years ago, after erysipelas of the face, had a swelling over the left lower jaw which gradually increased in size, and was excised twelve months after its onset. The incision, however, never healed, an ugly ulcer having developed. The glands next enlarged in the posterior triangle of the neck, and nodules appeared in a downward direction over the chest, so that altogether about twenty or thirty small tumours developed. Each nodule as it came under the skin very soon developed a pustule; this was followed by ulceration and fungation of the growth. Ponfick's description was so exactly simulated that Mr. Treves felt strongly inclined to name the disease actinomycosis, though no fungi were ever found, and no communication could be traced with animals. After a first operation, which consisted in removal by various means of many of the nodules, the patient seemed to do well, and the places operated on healed rapidly. Unfortunately a second operation in the axilla was followed by great weakness and death in one month. At the autopsy secondary deposits were found in the lung, liver, kidney, and spleen, which took the form of round yellowish nodules. The organs were submitted to Mr. Watson Cheyne, who had carefully examined the new growths without discovering any micro-organisms, or being able to cultivate any micro-parasites. The microscopic structure of the new growth was like that of alveolar sarcoma, in which clusters of cells were arranged in a plexiform manner, with a certain amount of connective tissue. The suppuration of each little nodule soon after its appearance was very remarkable, as was also the protracted character of the disease. The diagnosis at times lay between scrofula, cancer, farcy, and actinomycosis.—Mr. HULKE had seen the case during life, and although he admitted the possibility of its having been one of malignant disease, he was yet greatly struck with its resemblance to some cases of farcy which he had seen.—Mr. WATSON CHEYNE said that he had tried to differentiate micro-organisms by attempting cultivations in serum slightly coagulated. Intra-peritoneal inoculations performed on two rabbits and a guinea-pig were followed by absolutely negative results; no disease followed of any kind; and the piece of tissue introduced could not be discovered. As the farcy organism could be easily cultivated, farcy might be excluded from the diagnosis by these experiments; he thought the disease was carcinomatous.—Mr. TREVES, in reply, said that the case was rather slower than even the most chronic case of farcy.

Dr. BURNEY YEO exhibited a Cast from the Trachea. It had been expelled by an elderly gentleman aged sixty, who had been under treatment at Eastbourne for thoracic aneurism, and had derived great benefit from large doses of iodide of potassium. The cast was ejected after a severe cough which had tormented the patient for three days and nights. Dry rhonchus only was to be heard all over the chest. The sitting posture relieved the distress somewhat. Dr. Yeo thought the cast was probably a thin blood layer in one of the bronchi which had undergone some organisation, but he was very doubtful of its nature. It measured one inch in length and three-quarters of an inch in width when spread out. At first it seemed to be infiltrated with blood pigment.

Dr. CHARLEWOOD TURNER read notes of a case of (?) Syphilitic Lardaceous Disease of the Right Suprarenal Capsule. The man was aged thirty-four, and had died of an illness which was diagnosed as pneumonia. There was a marked history of primary and secondary syphilis. Section of the diseased capsule showed a very much enlarged central portion, of a flattened, pyriform shape. The suprarenal vein was enlarged and its walls thickened so as to resemble an artery. In a piece of the diseased organ measuring about one inch in thickness and one inch and a quarter in length, and apparently composed of fibrous tissue, there were numerous wide vascular channels; this appeared to be the altered medullary substance. Under the microscope, the radiating fibrous tracts were seen to consist partly of long spindle-shaped fibres with elongated nuclei, and a finely fibrillated matrix. The tissue between the tracts was of a yellowish tint and had a broken-down appearance. The walls of the vessels had a homogeneous look, were thickened and stained deeply. This specimen was regarded as an instance of infiltrating syphilitic growth invading the adrenal body. But little seems to have been recorded of syphilitic supra-renal disease. In Dr. Greenhow's work out of 186 cases of disease of this organ three were classed as miscellaneous. The writer in Ziemssen's Encyclopædia mentioned gummata and induration of the adrenals in infants. Dr. William Ewart had described fibroid and calcareous supra-renals, and one much lobulated and divided into a number of islets. Other cases were referred to from Virchow's Jahrbuch. Another specimen of supra-renal disease was referred to. There was much thickening of the capsule. The cortical substance was fattily degenerated, and a fibrous thickening of the septa was present. He called attention to the remarkable amount of muscular tissue which surrounded the supra-renal vein, more especially on one side; muscular fibres were also seen in the capsule of the adrenal body. It was thought probable that this muscular tissue was a normal factor, and regulated the supply of blood to the organ.

Mr. SYDNEY JONES showed many Long and Short Bones taken from a case of Multiple Exostoses. The specimens could not be mistaken for chronic rheumatic arthritis, because it was chiefly the shafts of the bones which were involved. The subject was a man aged fifty-five, who had twice attempted suicide.

Dr. PERCY KIDD read notes of a specimen of Fibro-myoma of the Stomach. The tumour, which had given rise to no symptoms during life, was found in connexion with the cardiac orifice of the stomach in a patient who died of abscess of the liver. The growth, which was tough, whitish, and of a somewhat reniform shape, seemed to spring from the submucous tissue of the stomach, and had no obvious connexion with the muscular coat. It partially encircled the œsophageal opening without causing any stenosis. The stomach

was elsewhere healthy. The microscopical characters of the tumour was that of a fibro-myoma, the prevailing structure being myomatous. Such tumours were decidedly rare, were usually small, and commonly situated towards the cardiac end of the stomach. The present specimen considerably exceeded in size the largest tumour of the same nature mentioned in Virchow's "Die Krankhaften Geschwülste."—Dr. NORMAN MOORE spoke of a specimen of gastric tumour in a girl, aged eleven years, suffering from great anæmia. The growth was as large as a five-shilling piece, and had led to a small perforation near the cardiac end of the stomach; this was followed by peritonitis.—Dr. ANGEL MONEY had seen a small tumour of (?) fibromatous nature in the stomach of a child, aged six years.

Mr. LOCKWOOD gave a brief account of a Tumour of the Scalp supposed to contain cartilage. On section of the growth little rods, which looked like hyaline cartilage, could be seen traversing the tumour. There were many round- and spindle-shaped cells lying between the little rods. He had been unable to find a record of a similar tumour.—Mr. BOWLBY said that the mode of extension downwards of the tumour resembled what was seen in cases of epithelioma where tubular prolongations growing inwards could be seen. He did not think that there were any cartilage cells; there was an appearance of mucous tissue, and he suggested that a mucoid degeneration would explain the cartilaginous look. This specimen was referred to the Morbid Growths Committee.

Dr. QUARRY SILCOCK showed a specimen of Malignant Lymphoma. The patient was a boy aged four years. Emaciation with signs of intestinal obstruction were the chief clinical features. The lower part of the jejunum and neighbouring portion of the ileum were of a dead-white colour, and their coats greatly thickened with the infiltrating growth. Ulceration had occurred at one point from the bowel into the lymphomatous mass. The specimen was looked upon as one of diffuse infiltration of the walls of the intestine, which had spread along the lines of least resistance, and had not picked out those tracts which had a specially lymphoid structure. Microscopically the growth was composed of lymphoid tissue—i.e., lymphoid cells set in a retiform stroma.

Mr. KNOWSLEY THORNTON said that the fluid from this case of cystic spleen contained much cholesterine. At one part the multilocular cyst was so thin that the shiny scales could be seen through the wall.

Seventeen Card Specimens were exhibited:—Mr. Arbuthnot Lane: Several specimens of Ununited Fractures of Rib; Incomplete Fracture of a Rib; Ununited Fracture of the Humerus, with United Fractures of Condyles and Trochlea. Mr. Sydney Jones: Stomach after Excision of Cancer of Pylorus. Dr. Percy Kidd: (1) Tuberculous Ulceration of Pharynx; (2) Polypoid Tumour of Left Ventricle. Dr. Hale White: (1) Atrophied Bones of the Arm after Post-hemiplegic Rigidity; (2) Intestinal Obstruction from old Pelvic Adhesion; (3) Thoracic Aneurism in a Woman. Dr. Carrington: Dissection of a specimen showing Malposition of Kidney, arrested Development of Left Side of Uterus and absence of Left Ovary and Fallopian Tube. Dr. Turner: Pistol-shot Fracture of Cranium. Dr. Hobson: Malignant Disease of Cæcum. Mr. Sutton: Diseases of Ductless Glands in Wild Animals. Mr. Swinford Edwards: A Cyst on the Ulnar Nerve. Mr. Horsley for Mr. Heath: Recurrent Myxomatous Tumour of Parotid Region. Dr. Goodhart: Tumour of Pituitary Body of an Anubis. Dr. Sainsbury: Tubercle of Brain. Mr. Alban Doran: Broad Ligament Cyst developed above the Fallopian Tube.

HARVEIAN SOCIETY OF LONDON.

A MEETING of the above Society was held on Thursday, April 17th, Dr. Percy Bolton, Vice-President, in the chair.

Note on a Form of Diarrhœa in Children.—Dr. LEES, in his paper, called attention to a class of cases not very uncommon in children, in which the main symptom is an irresistible impulse to defecation experienced almost immediately after food has been taken. Colic pain may or may not be present, but there is no sensation of weight at epigastrium, heartburn, flatulence, or other symptom of dyspepsia. The motions are usually semi-solid, not often watery or slimy, and frequently contain undigested food. Usually a motion is passed almost immediately after every meal, and perhaps once or twice more during the twenty-four hours. Dr. Lees pointed out that these symptoms are evidently due to a hyperperistalsis of the alimentary canal, without increase of secretion, the two factors of ordinary diarrhœa being here dissociated. Such increase of peristalsis is probably due to irritation of the vagus nerve, which supplies the excitor fibres to the intestine, the splanchnics conveying the inhibitory fibres. The proximity of the nucleus of the vagus to that of the trigeminus in the medulla indicates the possibility that this increased excitability of the intestine may in part be due to dental irritation, the cases in question usually occurring during the period of the second dentition. Believing in the purely neurotic origin of the symptoms, Dr. Lees had treated several cases with bromide of potassium simply, without opium or any astringent, and had obtained immediate relief, even in cases which had persisted for several months. The diarrhœa was usually arrested in a few days, and occasionally the children became so costive that the medicine had to be discontinued. Four cases were narrated, also a similar case occurring in an adult, in all of which speedy relief was given by bromide. In conclusion, it was remarked that individuals who suffered from these symptoms were often of a remarkably neurotic temperament, timid and easily frightened.—Dr. DAY enumerated the various forms of diarrhœa met with in children, most of which could be shown to depend upon some error in diet. Cases such as those described appeared to own a nervous origin, and were amenable to appropriate treatment.—Mr. MIVART had met with several instances of the condition described. In one case, occurring in a telegraph boy, he had employed bromide of potassium with complete success.—Dr. ALDERSON recognised a neurotic form of diarrhœa in young children, and bearing in mind the efficacy of bromide of potassium in arresting the convulsions of dentition, he thought this same agent might be found most useful in controlling the diarrhœa due to the same cause. Dr. Alderson mentioned that he had seen cases where mischief had been caused by prescribing prepared chalk and gum; such a mixture, although stopping the diarrhœa, subsequently produced hard fæcal concretions, and not infrequently led to peritonitis. He would like to have heard Dr. Lees' opinion as to the treatment of the dyspeptic diarrhœa of children, as well as of those forms caused by filth, atmospheric changes, and defective sanitary arrangements.—Dr. EWART referred to the beneficial effects of arsenic in cases of diarrhœa set up by the ingestion of food, and to the success which attends the administration of small doses of grey powder in combination with aromatic powder of chalk in the diarrhœa which often accompanies the first dentition.—Mr. CRIPPS LAWRENCE, speaking of the diarrhœa of children during the second dentition, called attention to the mental restlessness peculiar to that age, which, no less than the tender gums, contributed to rendering mastication imperfect. Could not the satisfactory results obtained by Dr. Lees be in a great measure explained by the soothing effect of the bromide and by the less hurried meals?—In his reply, Dr. LEES alluded to the mode of action of mercury in infantile diarrhœa; it probably was of service chiefly as an anti-putrefactive agent. Arsenic had been stated by Dr. Clifford Allbutt to be contra-indicated in neurotic subjects. The kind of diarrhœa described claimed to be looked upon as a special variety, inasmuch as it was essentially independent of diet.

Acne Rosacea.—A paper was read on this subject by Dr. T. ROBINSON. Like lupus erythematosus, rodent ulcer, sycosis, and other lupoid processes, acne rosacea was almost universally limited to the face. In rare cases the disease appeared on the scalp of bald subjects, and it had been observed by the author to occur over the sternum. Acne rosacea was always associated with an irritable state of the mucous membrane, especially the stomach. It was always heralded by fugitive flushings of the face, especially occurring after food, but increased also by other causes, such as wind, exposure to sun, or soap. These flushings lead to permanent dilatation of the capillaries, followed by stasis, formation of papules, and all the inflammatory states peculiar to the malady. The inflammatory action might or might not involve the sebaceous follicles. The malady had a close relationship with what was known as relapsing erysipelas of the face, and with vesicular and non-vesicular erythema, which attacked the same situations and obeyed the same laws. Lupus erythematosus was also akin to acne rosacea; it was not possible by any outward manifestations to distinguish one disease from the other in their earlier stages. Acne

rosacea did not occur before the age of puberty; it was about equally distributed in the two sexes until the climacteric period of life, when it was seen much more frequently in the female, and was due in these cases to physiological activity of the hair-follicles, in the chin and upper lip especially, as is seen in the growth of hair in these situations at the said epoch of life. There were skins which could not develop acne rosacea; the latter was commonly only an expression of a local tendency in a general dartrous diathesis.

Dr. ALDERSON related a case of severe Acne Rosacea in a young lady, aged sixteen, which had for a long time baffled treatment. When first seen by Dr. Alderson the appearance was almost that of semi-confluent small-pox in its pustular stage. A mixture containing compound decoction of aloes with soda and solution of arseniate of potassium was prescribed, also a drachm of compound liquorice powder (G.P.) every night. The face was painted with a solution of nitrate of silver in nitric ether (a drachm to the ounce), and a poultice subsequently applied. Severe pain was set up, and after the application of a soothing lotion containing oxide of zinc, bismuth, and lead solution, several of the pustules were lanced, and abundant pus let out. The caustic solution was applied frequently at intervals, and in the course of a month the patient was almost well. Dr. Alderson was at that time attending the patient's father for a severe attack of acute eczema, associated with gout and with syphilitic psoriasis of the hands and fingers.—Mr. DREW gave an instance of the value of scarification in a case of hypertrophy of the nose associated with acne rosacea.—Dr. LEES referred to the frequency with which acne rosacea was found in those who were strictly temperate.—In reply, Dr. ROBINSON expressed an opinion that the case related by Dr. Alderson was one of acne indurata, rather than of acne rosacea. Scarification could hardly be of use in cases of true elephantiasis, but where acne rosacea was superadded to pre-existing acne of youth, this measure, as well as division of enlarged vessels, might be tried with advantage.

Reviews and Notices of Books.

The Organs of Speech. By G. HERMANN VON MEYER. London: Kegan Paul, Trench, and Co. 1883.—This book is the forty-seventh term of the International Scientific Series. It abounds in useful information clothed in a popular form. A certain amount of technicality is no doubt inseparable from the subject, but that kind of knowledge has been kept as much as possible within bounds. Whether it is true or not that the philologist ought to become acquainted with the structure and functions of the organ of speech may be a matter for discussion. It has not unfrequently been said that memory and other mental acts go on the better the less we think or know about the processes themselves. However that may be, there can be no doubt that an acquaintance with the organs of speech and their application in the formation of articulate sounds is a study as interesting as the use of the organs in question is practical. The volume is essentially an instructive one. That protean individual, the reader of popular works, might lay the book aside as dry and stale. For such the information is hardly meant. Study will be necessary if any good is to result from its reading. Such considerations are the more obvious when even a passing glance is taken of the various parts concerned in the expression of language. After these prefatory remarks we may proceed briefly to indicate the arrangement and character of the contents of the volume. The first chapter is occupied with the description of the anatomy of the parts concerned in speech, with an account of the method of production of the air current which throws the true vocal cords into musical vibration. The relation between the organs of speech and the formation of sound is explained and amplified in the second chapter. Hiccough, gaping, and stammering are here included, and also the mechanism of the common acts of sneezing, coughing, laughing, and sighing. The section of the larynx as an apparatus for producing tone is well done. Müller's experiments on the causation of different tones and semi-tones by increasing the tension on the vocal cords are largely quoted. In the final chapter the mode of construction of the different elements of articulate sounds finds adequate explanation. In the introduction we think the author goes rather out of his depth when he says that the various modulations and combined sounds in the croak of a frog, in the song of a nightingale, and in the nocturnal concert of cats seem to require that some conceivable meaning may be hidden in such harmonies; and the probability is increased by the fact that in the legends of all nations an important part is played by wise men who understand the language of animals. We may add that the translation is good, and that forty-seven woodcuts aid in the exposition of the text.

Malpositions of the Kidney. By DAVID NEWMAN, M.D., C.M.—This thesis for the degree of M.D. Glasgow divides displacement of the kidney into three kinds—simple misplacement, without mobility of the organ; "movable kidney," where the kidney is perceptibly mobile behind the peritoneum; and "floating" kidney, where the peritoneum forms a mesonephron which attaches the kidney loosely to the spine. The paper contains many valuable tables and much useful information concerning the distress of such affections. The operation of nephroraphy, in which the kidney is stitched to the wall of the abdomen (by an incision to reach the kidney from the loin) is advocated. Deep sutures of strong catgut which has been kept in chromic acid are made to secure the actual renal tissue and its capsule to the wall of the abdomen. This procedure has been done eight times, and apparently with excellent results.

Catechism of Modern Elementary Chemistry, or Solutions of the Questions set at the London University Matriculation Examinations. By E. W. v. VOLCKXSOM.—This little book is excellent in its way, and is very attractively got up. It is a matter of opinion whether it be wise to relieve the student of the admirable practice of working out his own answers, but students who prefer to have questions collected and answered for them, and who intend to pass the London Matriculation Examination, will find here a concise *vade mecum*. As a rule the author has provided good replies to the questions set, but occasionally he seems to have lost the real aim of the question—e.g., in No. 406, where a translation into words of a simple chemical equation is required, the writer gives a descriptive account of explosions in coal mines and the consequent dangers to the imprisoned victims. In describing the construction of flames, some allusion might have been made to Frankland's theories. In the enumeration of the physical tests for glass and diamond, their relative hardness and specific gravity need not have been omitted. In the verification of sulphur as a constituent of sulphuretted hydrogen, the staining of a silver coin or the blackening of lead paper ought to have been mentioned. In the detection of sulphuric acid in vinegar the allowance by Act of Parliament of the addition of a certain amount of that acid for preservative influence is worthy of notice. For the sake of the tyro, it is right that the following egregious errors be expunged from future editions of the book:—"Sulphur dioxide is a very acid gas. No other acid possesses bleaching properties. Baric chloride solution produces no precipitate with strong nitric acid. The solubility of a white precipitate (produced from silver salts) in ammonia is proof of the presence of a chloride. Hydrochloric acid vapour in a room is free from deleterious properties. Hydric sulphide burned in a limited supply of air produces sulphur dioxide and water. Copper acting on strong sulphuric acid yields only cupric sulphate, sulphur dioxide and water. Diamond burns with flame in oxygen. Diamond does not break easily. Silicon is the most abundant solid compound (*sic*) of the earth's crust." Throughout the work the author confounds acids with anhydrides. To say that potassium burns into flame when dropped into water, and that calcic

phosphide takes fire spontaneously when thrown into warm water, is very lax language for a scientific chemist to use; whilst the assertion that organic matter and nitrites are common constituents of spring water is a rather delusive, if not a dangerous, statement. When such conspicuous blemishes are removed the catechism will doubtless have its value.

Studies from the Biological Laboratory of the Johns Hopkins University, Baltimore. Edited by NEWELL MARTIN, M.A., D.Sc., assisted by W. K. BROOKS, Ph.D. Vol. III., No. 1. March, 1884.—The first part of the new volume opens with a paper by H. W. Conn, on the significance of the larval skin of decapods. In this paper he arrives at the conclusion that all decapods are to be referred back to a form similar to the protozoëa, in which the segments of the thorax, and probably of the abdomen, were present, and whose antennæ were locomotor organs. In the larval history of most living decapods the protozoëa has become modified by the free life of the embryo, and the result has been the appearance in the embryology of a zoëa stage—a stage differing quite widely in different groups of decapods, and which must be considered as a secondary larval modification, and not as an ancestral form. There is a second article by the same biologist on the life-history of Thalassema, and, lastly, a paper by Henry Leslie Osborn, on the gill in some forms of Prosobranchiate Mollusca. There are six plates.

A Compend of Surgery for Students and Physicians. By ORVILLE HORWITZ, B.S., M.D. With Fifty Illustrations. London: H. Kimpton. 1883.—This is the ninth of a test series of manuals especially designed for the use of students preparing for examination. It consists of 133 small octavo pages, and is neither better nor worse than other similar attempts to condense the science and art of surgery into such small compass. We notice in it many omissions and not a few statements needing qualification, while the order in which the subjects are treated is remarkable for its confusion; and the reader is not aided by an index. We observe that an excellent illustration of a varicose aneurism is called an "aneurismal varix"!

The Essentials of Pathology. By D. TOD GILLIAM, M.D. London: H. Kimpton. 1883.—This is a small compendium intended to give in condensed form what is much better presented in the various high-class text-books that are now available. Its author, who was formerly Professor of General Pathology at Columbus Medical College, Ohio, doubtless found such a compendium of use to himself in teaching the subject; and certainly it shows evidence of accurate and wide knowledge of the literature of pathology. But it does not appeal to the student with the same freshness and force as it would were it based more entirely on the author's own experience. Such illustrations as are to be found in the book are not original. Most of them are culled from Rindfleisch's work, but in no part of the book is any acknowledgment made of their source.

Die Schicksale der Transfusion. Von ERNST VON BERGMANN. Berlin: Aug. Hirschwald. 1883.—This pamphlet contains the substance of an address delivered by the author at the anniversary festival of the Army Medical School. The physiological questions involved in the different methods of practice of transfusion receive some attention. The dangers which may happen from the transfusion of blood from animals of different species to the recipients are fairly well drawn. Hæmoglobinuria in relation to transfusion is also dwelt upon. The matter is pleasant reading, but nothing new seems to have been brought to light.

On Photographing the Larynx. By T. R. FRENCH, M.D. —This is a reprint from the now extinct *Archives of Laryngology*. It contains the results of attempts to photograph the larynx. The attempts seemed to have been crowned with a certain amount of success. The value of photography in cases of laryngeal disease is decidedly practical and commendable. So much mystery seems to lie behind the epiglottis that any process which aims at elucidating the darkness must deserve praise.

THE ARMY ESTIMATES.

IN the discussion upon the Army Estimates on Monday last, the Hon. G. C. Dawnay took the opportunity to repeat some of the oft-refuted charges against the medical department, which were the subject of investigation before Lord Morley's Committee, and which were then shown to be founded for the most part on camp gossip. The object of the honourable member appeared to be to laud the regimental system of the Guards, and to decry the departmental system now in operation in the army generally. It seems unnecessary again to go over a subject which was so fully discussed last year. Dr. Farquharson, in commenting upon Mr. Dawnay's "very elaborate and, he thought, unjust attack upon the medical department," stated, as the result of his inquiries into the working of the service in the late Egyptian campaign, that "it was one of the most successful departments, from a medical point of view, that had ever been known in this or in any other country," and he found that most of the complaints with regard to the hospital supplies were made by men who had never had experience of active service. Colonel Stanley, whose knowledge of the administration of the army, acquired as Secretary of State for War, entitles his opinion to great weight, pointed out that the defects which were found to exist in the medical service on that occasion arose from "the fact, as Sir J. Adye had said, that military necessities overruled everything. A sudden change of plan made secrecy necessary, and then there was not the opportunity of making the ordinary arrangements beforehand, and what had been done was turned to another purpose." Colonel Stanley pointed out that under the altered conditions of the army it would be impossible to revert to the system of regimental medical officers, but he did not think the present exactly the moment for changing the system in the Brigade of Guards. Dr. Lyons was of opinion that it was unnecessary to defend the working of the Army Medical Department in Egypt from the charges that had been hastily and unjustly brought against it, but called attention to two points on which he thought improvement necessary. The first was the system of nursing; and the second, the necessity for a more intimate relation between the chief of the medical staff and the commanding officer in the field. Lord Hartington bore testimony to the efficiency of the medical service in that campaign, and pointed out that the shortcomings which were shown to have existed "were to be attributed to a failure of an admittedly most difficult problem, likely to befall any military nation—the thorough organisation of its departments of supply to its army on the field." He doubted whether any good could arise from repetition, after so long a time, of charges "more or less vague and unsubstantiated." Lord Hartington expressed a very natural fear that if medical officers were attached to regiments, and at the same time doing duty in the station hospitals, "they would be under two commanding officers—a system that was not likely to work satisfactorily." He also pointed out that under the present system the department, which previously was literally dying of inanition, had regained its popularity with the profession, and had no difficulty in procuring an adequate supply of well-qualified men to fill its vacancies, and he deprecated any change which would be opposed to the feelings of the medical profession. We think the Army Medical Department has every reason to be satisfied with the debate, as it brought out ample testimony to the efficient manner in which the medical service in Egypt was conducted. Some minor changes as regards nursing, the amalgamation of the medical officers and Army Hospital Corps, the transport department in connexion with the hospital service, and the provision of suitable quarters for medical officers, are under consideration by the Secretary of State, and will, we have no doubt, tend to increase the efficiency of the department; but there does not appear to be any necessity for changes in the Medical Department beyond such as are quite within the power of the Director-General, and which, we have no doubt, he will bring into operation as occasion may require.

THE LANCET.

LONDON: SATURDAY, MAY 10, 1884.

WHATEVER claims to our consideration may be urged for the Council of the College of Surgeons as at present constituted, it cannot for a moment be contended that it has met with much success in its attempts to control and improve the education of medical students. The superior merits of the Fellows by examination are always being forced on our attention, but the Council has removed all the restrictions which secured a good preliminary education, and of late years the minimum standard needed for entrance to our profession has been deemed quite sufficient for the Fellowship. Again, attendance on a routine course of lectures on comparative anatomy is compulsory on every candidate for the higher qualification, but it is quite immaterial as to whether any knowledge of the subject is acquired, for this is not included in the examination. Its system of examination is so rigid and inelastic, that according to the Visitors of the General Medical Council it fails to do justice to a doubtful or nervous candidate. A few years ago it began to publish annually the number of candidates for its Membership who presented themselves from the various teaching bodies, with the percentages of passes and rejections from each school. This was supposed to maintain a healthy rivalry between the teachers; but, as might have been foreseen, it has in many cases only caused them to keep back every doubtful candidate, and so secure an average which was quite misleading as to the value of the teaching. This list will no longer be published. It might have been of some value if it gave the proportion of candidates at the examinations to the number of entries at the schools, and if the Fellows had been included, as showing a higher quality of teaching; but in its past form it only served to present at a disadvantage those schools whose teachers conscientiously sent up all their students for this examination, as was the general practice before its publication. Still more recently a referred candidate was compelled to attend a practical course of physiology, as well as to perform dissections, during the period for which he was referred. The teachers were thus enabled to ensure that he should pass his time in diligent study, and be better prepared at the next attempt, and the teachers of physiology in many schools have put themselves to much inconvenience and expense to provide a course of practical teaching to meet these requirements at all periods of the year. This regulation is now removed, and a referred candidate can now spend the period between the examinations in complete idleness, away from the dissecting-room or the laboratory, and present himself again and again without the teacher's consent or knowledge. On the same plan, we suppose (although this is not yet stated), that a student who is rejected at the final examination may cease his attendance at the clinical lectures and in the wards of the hospital, and his teachers be powerless to enforce such an attendance. The only limit to his appearances before the examiners will be the refusal of his guardians or his own inability to pay the fees for the examinations. In 1882 the Council, in spite of the objections of many teachers, who urged that periodical examinations were already in vogue in the best regulated schools, compelled the lecturers in anatomy and physiology to institute an examination of their students in the first year, and the most important reason put forward for the new regulation was that it gave more power to the teachers in refusing to sign the certificates of idle students. In 1884 all power over referred candidates at the primary examinations is taken away. We should have thought that it was well known to everyone with the slightest experience in the education of medical students that it is this class that specially requires supervision and regular instruction. The Council does not seem to have formed any definite opinion as to what constitutes a proper system of medical education. It is continually tinkering at it—now at this regulation, now at that; every member tries to pass his pet crotchet, and hence these inconsistencies, which do so much harm and give so much trouble to both students and teachers. If it can formulate a well-digested and consistent scheme, this should be done without delay; if it cannot, it should cease from harassing the schools with hasty and ill-considered regulations, which are altered in every successive year.

THERE are some facts which seem to lose force by their very patency. Good which would excite admiration if it were strange ceases to command regard because it is familiar; and evil which would incite feelings of revulsion, and even stir indignation if it were for the first time brought under notice, fails to elicit any emotion, simply because it stands perpetually before us, and has so long challenged attention that we have come to look upon it as little more than an inevitable annoyance. It is in this last-mentioned light, we must assume, the profession has grown to regard the position of those of its members who are engaged in the Poor-law service, whether as district or workhouse medical officers. It seems like "whipping a dead horse" to attempt the revival of interest in this subject; and yet it would be difficult to name another of equal socio-professional importance in the range of questions which from time to time agitate the public and professional mind. It is scarcely worth while to enumerate the so-called "grievances" of our brethren of the Poor-law service. It is perfectly notorious that they are over-worked and underpaid, that the requirement to supply drugs at their own cost is a burden and a blunder, and that they are wronged by being made to serve the public for an inadequate wage and under oppressive conditions, without reasonable prospect of relief by a superannuation allowance when their term of service has expired. If the economic government of this country were more rational in its principles and enlightened in its practice, the existing state of affairs would be felt to be indefensible. It would be perceived that it is impossible to get good work for bad pay; that the best of appliances will not, cannot, be used by the official who is left to find his own tools and materials; and that to give no prospect of provision for old age to a long service man is simply to render his discharge of duty perfunctory and spiritless, because hopeless. Nothing could well be less politic than the arrangement which now exists between boards of guardians and their medical officers under the patronage of the Local Government Board. It needs no

argument to make this plain to the common-sense intelligence of the profession or the country. The real *crux* of the difficulty as regards reform lies in the fact that medical men settling in a district to practise will take, and even struggle for, Poor-law appointments—not for their own value be it observed, but because whoever holds the local posts is practically in possession of the locality. It is not too much to say that, with scarcely an exception, district and workhouse medical officers would be heartily glad if there were no districts and no workhouses; but they unfortunately exist and they must be taken by somebody, and whoever makes the personal sacrifice of taking them will be in the field for private practice. Are the Poor-law authorities so demented as to suppose for a single instant that appointments taken—and, as we have said, even sought—on such terms can be worthily filled? If there were the smallest care for the welfare of the poor, or even intelligent carefulness to secure quick "cures" for economic reasons, the present position of matters could not be tolerated. Unfortunately, however, guardians and presidents of the Local Government Board do not care how the work is done if only they are not troubled with the consequences; and so the community goes on year after year inflicting grievous wrongs on medical officers and wasting money in bad work, and we fear it will continue to do so for many years to come, because the question of "Poor-law reform" is a dead horse, which no amount of whipping can call back to life, or even excite into the semblance of vitality.

What is to be done? If medical practitioners were less free-lances, and more members of a corporate profession, the remedy would be obvious and easy. They might agree among themselves that they would not accept appointments under local authorities unless better—in the sense of being more reasonable—terms were granted; but as matters now stand it is quite impracticable to carry out any such scheme of self-help and self-deliverance. The immediate effect of the resignation of medical officers would be to call into the field a crowd of hungry competitors for the vacant posts, and boards of guardians would with exultation elect the new men, while the Local Government Board would cast the sanction of its approval over the nomination without either scruple or conscience. The only course open to Poor-law medical officers is to "agitate," and "petition," and "protest," thereby keeping the subject before the public and the profession with the vague and somewhat dismal hope that when the opportunity offers the question in its entirety may be reconsidered. For ourselves, we must confess that we are weary of the whole business. It is like attempting to kick down a stone wall with naked feet to try to make either local or central authorities sensible of the facts in regard to the wrongs of Poor-law medical officers. We have memorialised successive presidents, and we have adopted divers means of bringing the facts under their notice. Cabinets are too busy with what they conceive to be "burning questions" of high policy to bestow more than a passing thought on a matter of domestic economy such as this of provision for the relief of the sick poor. Besides this, there is the malignant spirit of red tape rampant in the department. It has never been exorcised. The permanent officials are bland and courteous; but they smile with official complacency when complaints are pressed on their attention. The political head of the Board soon learns to recognise the questions which are shelved in the "office"; and this question of medical reform has for many years past been a pigeon-holed grievance in the clerical bureau of the Local Government Board. The permanent officials do not like the subject, and they "will not have it." This is the sum of the matter, and it is desirable to speak out plainly. One might as well hope to induce the Lord Chancellor or the Chairman of the Commissioners in Lunacy to bring in an honest Bill to amend the Lunacy Laws, as expect a President of the Local Government Board to promote medical reform in the Poor-law Department! The men who really promote or prevent departmental reforms are the permanent officials, and no permanent official in connexion with the Local Government Board is friendly to the cause of the "doctors." We strongly advise those members of our profession who desire to improve the status of Poor-law medical officers, and to relieve them of their burdens, to direct their efforts to the enlightenment of the Legislature; and we think they have better chances of success in the Lords than in the Commons.

THE Health Exhibition, which was formally opened on Thursday by his Royal Highness the Duke of CAMBRIDGE on behalf of the Prince of WALES, will, it is to be hoped, serve to arouse the public mind to the important matter of which it treats, and help materially to assist the sanitary authorities of the country in the discharge of duties which can only be adequately performed with the cheerful co-operation of the masses.

As regards the subject of Health, the Exhibition will prove most instructive. Nothing is more important from the point of view of health than the "Food" we eat and the methods of preparing it; and the subject of food is very fully illustrated. Raw food products are in great abundance, and the various exhibitors have vied with each other in displaying their wares in an effective and artistic manner. The great gallery, which last year was filled with fishing boats, is this year devoted to food products, and beginning with the magnificent display of Messrs. SUTTON and ending with the interesting show of dairy operations, the visitor will find in this gallery a great variety of attractive exhibits, which will serve to increase his knowledge of the sources of our food-supply, and place him *au courant* with the latest methods of preparing many articles of prime necessity. The collection of bakeries and ovens in full operation is sure to draw a constant throng of spectators, and the food manufactories in the Machinery Department will also be among the chief attractions to visitors. The practical side of the Food Exhibition will be found in the restaurants. The refreshment contractors, Messrs. BERTRAM and ROBERTS, besides restaurants of the ordinary type, have a restaurant on the DU VAL system, which is well known and appreciated by all visitors to Paris. The School for Cookery will show, as it did last year, how much this excellent institution has done for the country. Mr. LOCKHART will practically demonstrate how cheaply good food may be supplied. The Vegetarian Society will have full scope for airing its whims, and later in the

season the Chinese will try what attractions a Celestial dietary may have for the British public, whilst the Russians will make real koumiss from the milk of mares which have been specially imported from the Steppes of Tartary, and which will be exhibited to and milked before the wondering spectator. Non-alcoholic beverages are fully displayed, and there is no lack of cafés where the jaded visitor may refresh himself with a cup of coffee or tea, and perhaps a cigarette.

To the ladies "Dress" will doubtless prove one of the most attractive features of the Exhibition. The Historic Collection of British Civil Costumes is, we believe, unique. These costumes have been specially designed by Mr. LEWIS WINGFIELD, whose great knowledge of the subject is too well known to call for any remarks from us, and made for the Exhibition, at no small cost. The scientific side of dress has not been neglected, as will be easily understood when it is stated that Mr. TREVES has been the moving spirit in the display of it.

The "Dwelling," which constitutes perhaps the bulkiest part of the Exhibition, is treated in a measure historically; and the picturesque reproduction of a part of Old London, which has been erected under the supervision of the City Sub-committee, with the assistance of Mr. BIRCH as architect, will be one of the lions of the season of 1884. The attention to archaic details in this reproduction is most meritorious; and a stroll through the narrow door of Bishop's Gate, and down the irregular street, with its quaint windows and overhanging gables, will bring to mind the London of the Plague, the Black Death, and the Sweating Sickness, and will impress upon observers how much the artist lost and how much the sanitarian gained by the Great Fire of 1666. From the sixteenth century the visitors may walk in two minutes into the nineteenth, to the samples of two London houses of the modern type, placed side by side, in one of which are displayed all the common faults which are found in the modern dwelling, while in the fellow house, having the same ground plan, the methods of easily avoiding these common constructive errors are shown clearly and objectively. The elevations of these two houses are completed, but a few days will elapse before the internal fittings with their important lessons are ready for exhibition. The tradesmen's exhibits having reference to the dwelling are rich and varied. The different materials used for the construction and decoration of walls, floors, and ceilings are shown in profusion; while the so-called sanitary fittings are very properly relegated to a spacious pavilion, which has been specially set apart for their reception. Gymnastics and ambulances form a subsidiary, but not unimportant, feature of the Exhibition; and the advantages of physical training, and the best methods of giving first aid to the sick and wounded, will be objectively taught to those interested—and who is not so interested?

The Exhibition, be it remembered, is not exclusively devoted to sanitary matters. It takes cognisance of education also, and early in the ensuing month the new Technical School, erected by the City Guilds, will be opened with an exhibition of apparatus &c. used in primary, technical, and art schools throughout the country. Already there is a brave display of the *results* which have been obtained by the art teaching of South Kensington, and in one of the main galleries is a collection of articles of which the country may well be proud, and which demonstrates the great practical advance which our art workmen and workwomen have made in all art manufactures, whether ceramic, textile, metallic, or wooden.

In addition to the huge display of objects, there is a considerable amount of literature, which has been produced by well-known authors especially for the Exhibition. We are promised no less than twenty-nine handbooks having special reference to the Exhibition. Mrs. GLADSTONE is the authoress of one of these, and M. PASTEUR has superintended the production of another. The remaining twenty-seven authors are all well known in connexion with the subjects of which they treat. In addition to handbooks, there will be oral instruction by means of conferences and lectures, and it may be expected that some of the disputed points of sanitation will be thoroughly threshed out during the next six months. The purely scientific and technical side of sanitation has not been forgotten, and Professor CORFIELD and Mr. WATSON CHEYNE will initiate the professional and general public into the arcana of the analytical and biological laboratory. The Meteorological Society have also arranged to exhibit a properly equipped meteorological observatory. Lastly, the Council will offer attractions which will induce Londoners during the summer to seek amusement out of doors. The gardens have been renovated, and are looking green and fresh, and what with music, concerts, the electric light, and all the glittering and attractive objects which are on show, it may be certain that crowds will flock to South Kensington in search of amusement, and it may be hoped that many who go with this object only, will come away with considerable additions to their stock of useful knowledge.

The Exhibition covers considerably more ground than the Fisheries Exhibition, for it includes, or will include, the Guilds' Technical School, the Albert Hall, and a large annexe, which has been specially built for the accommodation of Belgium, that country having sent a very large display of most interesting material. When we consider the great size of the Exhibition, and when we reflect that the Executive Council were only called together in November, we must sincerely congratulate them on the work which has been accomplished. This great and interesting show has not been brought together without work, and real work, and the busy professional men who in great part constitute the Council and Committees must have found the Exhibition no slight tax upon their time and leisure. It is well known that much of the success has been due to the personal interest of the Prince of WALES, who has been President in fact as well as in name, and to the untiring energy of the Duke of BUCKINGHAM and CHANDOS, the Chairman of the Council. The Duke, we understand, has attended almost every meeting of the Council (nearly fifty in number), and has been at the Exhibition early and late nearly every day, with an eye to each detail, and superintending all the works with a tact and knowledge which would astonish those who believe that historic peers are merely ornamental personages. His Grace the Chairman, Sir JAMES PAGET, the Vice-Chairman, and the other members of the Executive Council, and the Committees deserve our thanks for what they have accomplished.

THE burial of the dead, if we regard it from a merely sanitary point of view, may appear but a laggard and im-

perfect mimicry of the pure and rapid resolution of the body by fire. At the same time, it is clear that many, if not all, of the evils incidental to the former process are due to neglect of precautions necessary for its efficient performance. No less certain are we that many of the objections which have been urged against the burning of the dead are great and real, and in the case of the medico-legal difficulty practically insuperable. Shall we, then, discard the more ancient method on account of its abuses, to take up the new with evils inseparable from it? Shall we not rather adopt a system, if such is attainable, which shall consign our earth to earth without detriment to the living? Are we when we die to be at once physically obliterated, in order to make doubly sure the public health, or may we choose to commit ourselves to the bosom of nature, trusting her to accomplish our chemical dissolution? That she can well do so, if not thwarted by human artifices of sepulture, is evident from the ease with which she has disposed and is disposing of much already dead animal and vegetable material. The world, in spite of her burials and her fossil treasuries, nay, in consequence of her work, remains a safe habitation of living creatures. If, perchance, it be otherwise, it is where cities have arisen and man is interfering with that work. Our danger arises from ourselves, and we believe that, all things considered, it can best be met by leaving the earth unhindered by barriers of metal, masonry, or even wood, to resume by gradual absorption our earthy elements, and to restore the gases which it cannot hold, to the ever-changing atmosphere. Mr. SEYMOUR HADEN has recently tabulated certain of the conditions under which alone burial can be truly sanitary. They amount to this—that no longer delay than is unavoidable shall occur between death and interment, and that no encasement that is stronger than mere decency requires, no oak or deal coffin, and no vault, shall come between the earth and the body. It is hardly necessary to add that such an interval must be allowed to pass after life is ended as shall guard against all possibility of mistaken death and of live burial. Here let us say that the reasoning which has been brought to bear in favour of cremation on the ground of such mistakes appears altogether chimerical. Live interments have been far from common, and have occurred, we cannot but think, in great part from gross carelessness, though no doubt partly also from exigencies of climate. But the argument between the rival methods collapses when we ask ourselves wherein it is worse that one who lies in death-like trance should awake to find himself in the grave than in the jaws of the crematory furnace. We presume, of course, that in such a case a medical certificate or other evidence without an autopsy has been accepted as proof of death. In order to secure the living, however, from contamination by the dead, it is insufficient to fix only the time and the means to be selected for burial. The site and distribution of cemeteries, the quality and the drainage of soils, and the propinquity of dwellings, are all important, and must be subject to official regulation. These details we need not now discuss at length.

Many persons are opposed to the burning of the dead because the practice of the creed of Scripture does not recognise it. True, no statement of Holy Writ can be quoted in its condemnation, yet the usage and associations of six thousand years in themselves are eloquent proofs in the understanding of such persons. In our view, the opposition of feeling is rather moral than religious in its character, and, in the absence of pressure from great public necessity against it, is certainly permissible. It is the feeling of repugnance to that which many reverent natures regard as almost criminal—the violent, however decent, dissociation by one's own agency of all that went to make the visible presence of a friend. This sentiment is native to every human being, and it is a just and reasonable emotion. We have stated why the needs of society do not require that it should be set aside. The "dust" out of which man came, his atmosphere of chemical activities in earth, air, and sea, is still capable in itself of receiving his dead body and reconstituting it in other forms, without entailing risk to the life upon the earth. It is further obvious on reflection that, whatever the efforts of legislation may be, burial must always serve as one chief means of disposal of the dead. Other modes are less universally applicable. The slain in battle cannot always be burned; they can always be buried. The dead poor, as we have shown in previous articles, must forego the more expensive process of cremation. The sea must receive its dead. Finally, while the present balance between life, death, burial, and public health, uneven though it be, is maintained, no Government could possibly allow cremation a higher than permissive standing in law. A large body of objectors would continue to bury. Cremation, moreover, lacks the *locus standi* which belongs to earth burial, and it cannot be offered to mankind as the sole practical solution of the evils of such burial when improperly performed. It certainly cannot be forbidden if due regard be had to propriety in its arrangements and to the requirements of jurisprudence. It must nevertheless be regarded as an interesting and philosophical, but in the main a needless, undesired, and impracticable idea.

IT is to be hoped that the bitterness of the strife between the rival camps of medical practitioners in the South African colony at Kimberley has diminished, and that a more amicable understanding has been established. To say the least, it is strange that so much difference of opinion could possibly have arisen concerning the nature of an eruptive disease which in many cases proved fatal, and which in its development and sequel was curiously like, if not identical with, small-pox; and yet we find that whilst Drs. ROBERTSON, SAUER (the medical officer to the Board of Health), GRIMMER (the district surgeon), FALKNER (the Cape Town Special Commissioner), SMITH, OTTO, BIRD, HARRIS, WALKER, and ZEEDERBERG asserted the epidemic to be no other than variola, Drs. JAMESON, WOLFF, MATTHEWS, CROOK, and CURREY strenuously opposed this view, either generally or as regards some particular cases that from time to time came under their notice. Prior to the outbreak in Kimberley district there had undoubtedly been a severe visitation of small-pox at the Cape. Now, the two localities are connected by paths of human intercourse, and thus the possibility of infection being carried from one place to the other requires no further demonstration. Dr. JAMESON is reported to have seen two patients in October, 1883, and to have said that they were suffering from small-pox. Subsequently he is stated to have changed his mind as to one of them, and to have declared in favour of febrile lichen;

whilst his next diagnosis was "a bulbous eruption allied to pemphigus"; and his final one "a severe form of chicken-pox." It seems incredible that a gentleman of Dr. JAMESON'S experience, attainments, and qualifications should have thus shifted his position, and, in the absence of proof to the contrary, we take it he has maintained a uniform and consistent line of action.

The papular stage of small-pox is simulated by acute lichen and syphilitic acne; the vesicular, when modified through previous inoculation or vaccination, by varicella; and the pustular to a certain degree by pemphigus and "varioliform syphiloderm." But then the widely diffused infection, the development of the eruption, the severe constitutional disturbance, and lastly, the alleged high rate of mortality, make it evident to our minds that the Kimberley doctors had before them a disease which in this country would have put the Hospital Asylums Board on active service. Nor does the fact of two of the victims having died from "pleuro-pneumonia," as certified by Dr. WOLFF, negative this contention, for inflammation of the lungs and pleuræ is one of the most commonly fatal consequences of the acute specific fevers.

We will not dwell at length upon the curious clinical and pathological ideas assigned to Dr. MURPHY—viz., that the malady was "infectious and contagious only to Kaffirs," for we fail to see the reason for an exclusive liability to infection being possessed by the coloured races; and, moreover, at or about this period of the epidemic eleven Europeans were attacked, and two of them died. That Kaffirs should suffer more than white men is a reasonable assumption, since they are less protected by vaccination, and their blood is, so to speak, a virgin soil for the growth of germs, the *materies morbi* of specific diseases. Whilst speaking of the rate of mortality, it may not be out of place to remark that up to Dec. 12th, 1883, one hundred natives were stricken, and twenty-five of these succumbed; and of twenty-four cases seen by Dr. SAUER more than half were fatal. From the foregoing statements we imagine that no one who is free to look impartially at the facts will question the conclusion that most of the cases were of a far more serious nature than chicken-pox, pemphigus, or syphilis. Nor is this conclusion invalidated by the belief ascribed to Dr. CROOK, that one of the patients died from "varicella hæmorrhagica," or "malignant chicken-pox." To us the expression "malignant chicken-pox" is a misnomer, a cloak that smothers and confounds the confusing doctrines of opposing factions. By what conceivable arguments can we convert the testimony of our highest authorities, that "chicken-pox is seldom or never fatal," into the phrase "mortality 25 per cent."?

Syphilis, in so far as its early manifestations are concerned, is equally put out of court. Again, the mere resemblance of one disease to another at some part of its history is not an adequate reason for asserting that they are essentially related, much less identical. A medical man may properly decline to give a definite opinion whilst the evidence is conflicting, but a doubt as regards the diagnosis of syphilis from small-pox must be transient. The only form of "pemphigus"—we are ignorant of its "allies"—that could possibly be mistaken for small-pox is the acute variety occasionally observed as an epidemic amongst children subjected to bad hygienic conditions, but even here the likeness is only partial and superficial.

Thus far we have discussed the facts and deductions *re* the Kimberley outbreak, as we found them reported in the local press. It remains for us to say that we have examined portions of skin said to have been taken from the bodies of two patients who died with a rash upon them, and as to the nature of which there was a divided opinion amongst the medical men. One specimen was removed from a St. Helena man who died at Kimberley Hospital on Feb. 27th, 1884; the other was from a white subject, an inmate of the Dutoitspan Lazaretto in Dec. 1883. From naked-eye and microscopical observations, including a comparison with known sections of small-pox eruption, we have no reasonable doubt as to the nature of the cases investigated—viz., that they were genuine instances of variola. Indignation meetings, votes of censure, and criminal and civil trials have been the natural outcome of a deplorable want of community of action during a serious epidemic. We should be glad to hear that the Colonial authorities at home had issued a special Sanitary Commission, with the object of clearing up the problematical points in this vexed question. The peril to the Kimbersley district has been removed for the time being, but for divers reasons it may at any moment "develop dangerous energy."

Annotations.

"Ne quid nimis."

ASSOCIATION OF MEMBERS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE Council of the Royal College of Surgeons of England cannot be congratulated on the position into which it has brought College affairs. So unenlightened has its public policy been that several eminent and distinguished Fellows persistently refuse to be nominated as candidates for the Council; and so suspicious and ungenerous has its behaviour to the Fellows been, that two years ago a large number of the Fellows formed themselves into an Association to wrest concessions, the consideration of which the Council had year after year declined to entertain. Now, the Members are driven into revolt, and have combined together for the purpose of obtaining certain privileges in reference to the management of the College, which they do not at present possess. What these privileges may be that the Members seek to obtain need not now be further discussed. In the dissatisfaction of the Members there is much with which to sympathise. The significant and ominous facts are that the Council of the College of Surgeons has alienated the sympathy and respect of some of the best esteemed of the Fellows and made others indifferent or forced them to form an Association for offensive and defensive purposes, and now it has driven the Members also into a combination to obtain privileges to which they are entitled, but to the demands for which the Council has always refused to listen. As if this were not enough, it will be seen in another column the Council has struck two heavy blows at discipline in medical schools by withdrawing all rejected candidates from the supervision and control of their teachers. And yet this is the body that practically controls the education of all English medical students, and to which every teacher must be more or less subservient.

HOSPITAL SUNDAY FUND.

THE Council of the Hospital Sunday Fund may be congratulated on the result of the challenge thrown out by the friends of the Royal Hospital for Incurables. The question whether that hospital should share in the benefits of the Fund was a fair one for discussion, though it had been well discussed before. But the case was stated both by Mr. Bennett and Mr. Loraine with a little too much warmth, and with a slight approach to an air of defiance. Everybody sympathises with the objects of the Hospital for Incurables; but everybody sees the distinction between hospitals for the cure of people, and hospitals where the hope of cure is abandoned, and admission to which is by a process so costly, and we might say cruel, as that of election. By this process a few people are admitted at a great expense, even to their friends—an expense which shows indeed that they have friends who, on a pinch, could maintain them; and a much greater number fail of admission after spending a great amount of money. By a very large majority of votes the constituency of the Hospital Sunday Fund have reaffirmed their objection to this mode of election. The Committee of the Hospital for Incurables will do well to reconsider their system of admission in the light of the vote of Monday. It cannot be denied that every opportunity was given to the friends of the Putney institution for converting the constituency of the Hospital Sunday Fund. Nothing but the plainest arguments were used in support of the rule of the Fund; but, in spite of the Rector of Marylebone, we must say that the case for Rule VII. was well argued, and the plausible points in Mr. Loraine's case were well met by Sir Sidney Waterlow. The result shows at once how deeply Rule VII. is respected by the contributing churches, and how thoroughly the Council of the Hospital Sunday Fund commands the respect of the constituency.

THE TOTAL REPEAL OF THE CONTAGIOUS DISEASES ACTS.

THE Secretary of State for War last week announced his intention of bringing in a Bill which will abolish the provisions in these Acts which were left in force by the legislation of last year. At present, women who voluntarily present themselves at the Government lock hospitals can be compulsorily detained until they are cured. We have again and again urged that this system of voluntary submission to treatment and compulsory detention was worse than useless, and that the latter could not be insisted on when compulsory examination was abolished. The facts have shown that our contention is correct, for women are everywhere prevented by it from applying for admission. In some of the certified hospitals no women have been admitted from the districts subjected to the provisions of the Acts for many months past, and in others only three or four inmates of this class remain, whilst at Shorncliffe the Government hospital has been closed. Unfortunately side by side with this we have letters from all quarters testifying to an increase in the number of women suffering from contagious disease, and that of the most severe type. To Mr. Buchanan's experience at Chatham we have recently referred; and in the *Colchester Gazette* a few days ago the experience of the medical men in that town was published. Dr. Alexander Wallace writes: "Disease is again rife among us;" and Mr. W. B. Wallis, the visiting surgeon to the Lock Hospital, adds that "the severity of the disease surpasses anything I have seen during a practice of thirty years all over the world." Yet at Colchester for nine years preceding the suspension of the Acts the number of cases among soldiers stationed in that district did not average five per annum; so that the disease had been reduced almost to a minimum. The failure of the present system is complete, and the authorities in the subjected districts are practically unanimous in declaring this to be the case. There can be no question as to the necessity for an alteration; and if the Marquis of Hartington, who was in favour of the continuance of the compulsory clauses, dare not bring forward a Bill re-enacting registration and compulsory examination of known prostitutes, there is no other course open to him but their total and unconditional repeal; although Sir William Harcourt stated to a recent deputation that it would be bitterly and violently fought in the House of Commons. The present unsatisfactory half-measure satisfies no one. The advocates for repeal object to compulsory detention, and voluntary submission has entirely failed in its hygienic results. As we pointed out last year, nothing else could be expected from such a combination; and in this opinion we were supported by the Select Committee. We cannot, therefore, regret that a Bill providing for the removal of all restrictions on free trade in prostitution may be passed; for it must bring nearer the time when the Legislature will be compelled by the force of public opinion to re-enact compulsory clauses, and then additional districts will demand to be included in the schedule. Repugnance to the principle involved in the Acts will not be allowed to stand in the way of their hygienic value, as this becomes more prominently apparent, and when it is properly recognised by the community how much has been lost by their suspension and repeal in the improvement of social order and decency, in the repression of juvenile immorality, and in the rescue and reclamation of the fallen.

PYÆMIA AFTER VACCINATION.

DR. DANFORD THOMAS, the coroner for Central Middlesex, held an inquest on Friday, May 2nd, at the "Bricklayers' Arms," North-street, Manchester-square, touching the death of an infant named Fullerton, aged six months. On the 2nd of April the deceased was vaccinated by Dr. Sumner, with two other children, from the same vaccinifer. On the 9th it was taken to him for inspection, and at that time no unusual symptoms had developed—in fact, the arm presented the appearance incidental to successful vaccination. On the 16th, being a fortnight after the operation, it was again taken to Dr. Sumner, and, as the sores were irritable, he prescribed cleanliness and protection. The infant getting worse, advice was sought at the Samaritan Free Hospital, and there Dr. Day is reported to have said, in the hearing of the mother, that the child was suffering from "blood-poisoning the result of vaccination." At that time the sores were described as ulcerating and freely discharging pus. Moreover, there was acute inflammation about the internal malleolus, and the infant was evidently very ill. Ultimately, Dr. Murray, resident medical officer of the Western General Dispensary, was called in, and he diagnosed bronchitis. Death occurred two days afterwards, or twenty-five days from the date of vaccination. As Dr. Murray did not consider that the bronchitis had been sufficiently severe to account for death, and as the mother had related to him what Dr. Day is supposed to have said, a certificate was refused, and the coroner was communicated with. An inquest was ordered, and Mr. Pepper was requested to make the post-mortem examination, which he did in conjunction with Dr. Murray. The body was well nourished. There was slight ulceration beyond the site of the vaccine pustules, three of which had become confluent. The associated lymphatic glands were a little enlarged. The large veins of the part were not thrombosed. Both temporo-maxillary articulations, the right sterno-clavicular joint, and the left ankle were full of pus, and so were both parotid glands. There were two small patches of purulent infiltration beneath the scalp. The bursa over the right olecranon had suppurated, and had recently burst. The lungs presented numerous wedge-shaped infarctions, some red and

firm, others partially decolourised and in process of disintegration. There were several patches of collapse, and the lower part of the right lung was in a state of red hepatisation. There was a moderate amount of bronchial exudation. The opinion given by Mr. Pepper, which was concurred in by Dr. Stevens, of the Local Government Board, was that the cause of death was pyæmia, the result of purulent absorption from the sores on the arm, and that the vaccination was accountable for it no further than that it was the method by which the wound of the skin was inflicted. Mr. Pepper stated that he was confident the infection of the wound was subsequent to vaccination, as the pyæmic lesions were of recent date. That the vaccine virus was pure is proved by the fact that the vaccinifer and the other two children vaccinated from it remain in good health. Dr. Stevens elicited from the mother of the deceased that a man in the same house had had abscess of the foot, and that occasionally she had washed some linen in the water that had been used for cleansing his clothes. No doubt attempts will be made to discredit the cause of vaccination by partial rendering and distorting the facts given above; but we say emphatically that vaccination *per se* had nothing to do with causing the pyæmia or the death that resulted from it. This unfortunate event shows the penalty that may have to be paid for neglecting the measures that should always be taken in the treatment of open sores.

A NOVEL (?) ANÆSTHETIC METHOD.

AT the Paris Société de Biologie (April 19th), M. Blanchard communicated a note by M. Debieyre of Lyons, upon the production of anæsthesia by rectal injection of ether. In rabbits, having previously cleared the bowel by enemata, the ether vapour was injected under a pressure of three cubic centimetres of mercury, and complete anæsthesia produced within three or four minutes. In the dog it is found necessary to combine the rectal administration with inhalation, when insensibility is very rapidly produced, and the like procedure may be employed on the human subject by using a double-necked flask, the manometer being attached to the neck and the rectal tube to the other, the flask full of ether being placed in water at 40° C., which suffices for the vaporisation of the former. The present report does not state whether this rectal etherisation has been put into practice; but not long ago we read in the "scientific column" (!) of a daily Paris journal a circumstantial account of certain operations conducted on patients anæsthetised mainly by this method. One of the cases was, we believe, an excision of the jaw. Now that the subject has been before the Société de Biologie we may be less inclined to question the facts recorded in so singular a way; at any rate, we would suggest the repetition of experiments upon the point, which many years ago attracted the attention of Pirogoff.

THE PUBLIC HEALTH BILL, ONTARIO, 1884.

A PUBLIC HEALTH BILL is now before the Legislative Assembly of Ontario, and it contains many important provisions, bearing much resemblance to those which form part of our Public Health Act; but it, at the same time, goes beyond any general statute which we possess. Thus, notification of infectious disease is to be compulsory, the duty being cast upon the householder and upon the medical man in attendance, both of whom must report either to the local board of health or to the medical officer of health, or, where there is no such officer, to the secretary of the board. Considerable restrictions are placed upon the movements and actions of persons, other than physicians and clergymen, who come into contact with infection, and health officers and local boards are required to give public notice of infected places by such means as in their judgment is most effective for the common safety. How such powers will be carried into effect, and how far they will answer the purposes intended, remains to be seen. A code of bye-laws is appended to the Bill so as to form a schedule to it. They relate to the duties of officers, to the sanitary state of dwellings, to slaughter-houses, piggeries, wells, &c.; but they are very inferior, as regards their scope, to those issued by the Local Government Board. The clause relating to the ventilation of drains is illustrated much after the manner of our annotated model bye-laws, but the arrangements shown in the Bill, and which are to be compulsory, are in several important respects such as the model bye-laws of this country distinctly prohibit. Thus, in a diagram appended to the Bill, the ventilated soil-pipe goes up inside the dwelling instead of in a chase outside, where it could have been thoroughly protected against the climate; the bath waste empties itself into the soil-pipe; the second ventilating opening to the drain, instead of being on the ground-level, is carried above the house in the same way as the soil-pipe ventilator, and ventilation by its means is impaired by reason of a sharp angle in its course; and the disconnecting trap in the course of the house drain contains a shaft rising from the lowest portion of the bend, and up which solid excreta are certain to float, and to remain, causing a nuisance. Our model clauses point out that this one form of trap should never be used. So far as the bye-laws in the schedule are concerned the Bill needs amendment.

A THERMOSTATIC NURSE.

CONSIDERABLE attention has of late been given to the question of artificially caring for feeble infants by means of an appliance which has come to be known by the name of a "Thermostatic Nurse." Our readers have been already acquainted with a mechanical *couveuse* of French construction, but we have recently had the opportunity of learning something of the mode of action and value of a machine of English make. Mr. Hearson, of 235, Regent-street, W., has constructed a thermostatic nurse on the same principle as the Champion Incubator for eggs, now so well known. It differs from the incubator, however, in having a cradle above the water-tank instead of a drawer below. The case of the thermostatic nurse is of wood, and is divided horizontally into an upper and a lower compartment by a shallow enclosed tank of water, which extends to within two inches of the woodwork all round, this interval being left to allow of the free access of air from the lower to the upper part. Above the water tank, and supported on slips of wood, is a cradle for the reception of the infant, which is kept in view through a glass window on the top of the apparatus. This sash is hinged at the back to a portion of the cover, about four inches wide. Affixed to this part of the cover is the lever plate, the alarum, and the thermometer, the scale of the latter being outside and under immediate observation. Through the bottom of the apparatus a hole three inches in diameter permits the entrance of a liberal supply of pure air, which constantly traverses two layers of very coarse canvas kept continuously wet. This is obtained by a simple arrangement of a metal tray with central perforated cap fitting over the opening in the bottom, and a coarsely perforated zinc plate coated on its upper surface by the canvas which dips into the water all round the edges of the tray. By this means the canvas is continually absorbing the moisture, while it is receiving a regular supply of heat from the bottom of the water tank; thus the air entering is uniformly moistened and heated. Altogether outside the apparatus there is a gas flame, the heat from which passes through a flue shaped like the letter U, so as to traverse twice the length of the water tank, by which means the water is heated. The great advantage of Hearson's apparatus, however, is seen in the automatic arrangement which it possesses for keeping

the internal temperature uniform. A hermetically sealed metallic capsule, two inches square, and containing a small quantity of a liquid which boils at 90° F., is fixed in the space at the head of the cradle; and in the centre of the upper part of this capsule is a button, having a cup-shaped depression, in which rests the lower end of a stiff wire, which passes out through the top of the apparatus, where it comes into contact with a light lever, which is pivoted to a brass plate. From the free end of this lever hangs a little damper, which rests on the top of the chimney under which the gas-jet burns. As soon as the temperature in the infants' room reaches 90° F., the liquid in the capsule will boil, and the vapour thus produced converts the flat capsule into a rounded one, thereby raising the rod, which, acting on the lever, at once lifts the damper off the chimney, allowing the heat from the flame to escape by that outlet, and preventing the further heating of the water tank. If a higher temperature than the boiling point of the liquid within the capsule be desired, this can be obtained by moving a weight along the lever towards the end to which the damper is attached; the further it is placed in this direction the greater is the heat produced. The alarum is made to ring whenever the internal temperature reaches a certain point. It should be mentioned that outside the machine, near the foot of the cradle, a feeding cup is placed, the food within which is kept warm and ready for use by means of the hot water in the tank. Dr. Clement Godson has the apparatus in use at the City of London Lying-in Hospital.

THE PURITY QUESTION.

PROFESSOR PARKES has well observed that hygiene in its widest and fullest sense lays down rules for the culture of the mind as well as of the body; for whilst the body is affected by every mental and moral action, the mind is profoundly influenced by bodily conditions. It is impossible to dissociate the two. To no point of morality does this proposition apply more forcibly than to the question of "purity," which has been brought forward so prominently of late in many important discussions. Impurity may be considered as originating from a naturally inferior, if not actually diseased, nervous organisation, in which the inhibitory or controlling powers are diminished, so that the individual acts only in obedience to the promptings of his own passions and desires. By yielding to this self-indulgence, the will becomes further weakened, and the body itself becomes exposed to many disorders and diseases. With a view therefore of diminishing the evils of impurity, and encouraging, in contradistinction, the principles of purity, many schemes have been advanced. The White Cross Army, established under the auspices of Bishop Lightfoot, is an association that proposes to make purity and chivalry towards woman the aim and object of membership. The attempt is a praiseworthy one, as bringing the matter prominently forward, and may even reclaim a few who have given way, though it is to be feared that a mere feeling of sentiment will not have more than a superficial effect. What is really wanted is that the disease be treated as an undoubted moral and social evil. It is not merely to inculcate the sentiment of purity, but to strike at the root of all impurity. Moral lessons of restraint should be impressed early in life. From a false sense of delicacy, fathers too often hesitate to speak openly to their sons of the dangers of school life, and the importance of resisting vicious habits, which when once practised are so difficult to break through, and lead to so much misery in after years. At schools, masters should be vigilantly alert to the necessity of promptly dealing with such offenders. We are convinced that, if less prudery surrounded the subject, and the matter were openly dealt with, hundreds who now fall victims to vicious practices at schools would be saved even from the temptation. Publicity is the only method of checking this evil, which is directly fostered by the system of cubicles, private studies, and small sitting-rooms; whilst all offenders should be removed. It is astonishing how quickly this vice will spread merely from the example of a small vicious circle. With regard to adult immorality, it is much to be desired that society itself meted out sterner penalties to the seducer and debauchee. In the earlier ages the discipline of the church was a powerful restraining influence; but that no longer exists, and neither society nor religion has eyes to see or power to punish these offences. When we reflect on the immense amount of suffering annually entailed on the votaries as well as the victims of impurity, and the disease engendered by it, it is a wonder that the Legislature has not yet interfered in such a way as to make the open practice of it impossible, or at least to remove temptations from our public thoroughfares. Impurity should be no longer allowed to go unrestrained, but ought to be legislated for like drunkenness, theft, or any other vicious habit.

MR. VINCENT RICHARDS ON THE CHOLERA VIRUS.

THE *Indian Medical Gazette* for April contains a paper by Mr. Vincent Richards, detailing his experiments on pigs, which, as stated last week, were at first erroneously thought to be confirmatory of the opinion of Koch that a bacillus is the essential agent in propagating the disease. Mr. Richards, who had previously failed in obtaining results in the dog, tells how he was led to administer choleraic discharge to pigs. A young animal so treated was attacked with vomiting and died in a few hours. Another pig was fed on the contents of the intestines of a pig killed by the choleraic discharge, and remained unaffected; it also was not affected by the alvine discharge from a patient in the first stage of cholera, but was subsequently killed in eighty minutes by the administration of an undoubted choleraic evacuation. Decomposing choleraic discharges had no effect on the pigs; but, as in other instances, the administration of recently passed stools proved more or less rapidly fatal, with symptoms of asphyxia. Mr. Richards concludes that "the alvine discharges at certain stages of cholera contain a powerful poison, whose chief action is to enfeeble and destroy the function of respiration." The rapidity of its action excludes it from being an organism, and he thinks that it is a chemical compound, probably of albuminoid nature. It remains for chemistry to isolate the body, and for experiment to determine accurately its physiological action; but Mr. Richards thinks that it will probably be found to be easy to disinfect the evacuations by permanganate of potash. He admits that, although the poison decomposes, it might, by desiccation, retain its powers for some considerable time, so that clothes &c. stained with choleraic discharges might be a source of danger.

LUNACY LAW REFORM.

THE Earl of Milltown has done good service by bringing the manifest insufficiency of the law to protect the sane from being mistaken for, and treated as, lunatics under the notice of the Upper House of Parliament. The noble earl gave a very full and accurate account of the defects of the existing provisions, and showed how they worked. The Earl of Shaftesbury, as in duty bound, and it would seem *con amore*, defended the *status quo;* but even his lordship was compelled to make some damaging admissions. Lord Coleridge followed, and in a speech which was, unfortunately, very inadequately reported, simply demolished the argument by which Lord Shaftesbury had supported his defence. Lord Selborne as Lord Chancellor, of course, spoke as though he held a brief for the Commissioners, but it was a pitiful parade of ignorance of the facts. His lordship evidently knew nothing of the subject, except what he was

able to pick up in the course of the debate, and from a report of the Select Committee. He had not even an official acquaintance with the statutes of the last five years, and talked unctuously of facts and "fears" which are so old as to have been forgotten. We fail to see how the Marquis of Salisbury could contrive to extract any comfort from the "promise" held out at the close of the Lord Chancellor's speech—that the present Government, if in office another session, will attempt to "amend and consolidate" the Lunacy Laws. Of course they will. Have they not been "just going to" do so since the first day of their existence? Even if they did "amend and consolidate," that would be no good. We demand reform.

MEDICAL SOCIETY OF LONDON.

THE final meeting of the session of this Society, which took the form of a conversazione, preceded by the annual oration delivered by Dr. Theodore Williams, was held on Monday last. A large gathering of the members of the medical profession welcomed Dr. Williams on his return to England and to health. In his oration, Dr. Williams dilated on the relations of the medical to other professions. He thought that the want of political power in the medical profession was largely due to the absence of interest which its members took in public affairs, and urged eminent medical men to take part in the affairs of State by coming forward and making themselves heard and known in the outside world. This might be done, he considered, without prejudice to the numbers who preferred to engage in the more scientific paths of their calling. The legal profession owed its influence in a great measure to its early recognition by the State. Speaking of the profession of education, Dr. Williams thought there was great need of reform, more especially in respect of female pupil teachers. These young women were often subject to the greatest strain at a period in their life when the needs of the physical frame were greatly in the ascendant, and when consequently the damage done by excessive mental work was likely to be greatest. A hearty vote of thanks was moved by the President, Mr. Arthur Durham, seconded by Dr. Fordyce Barker, and carried with acclamation. The walls of the rooms of the Society were abundantly decorated with pictures, chiefly etchings of recognised fame. Many quaint water-colours adorned the walls of the passages. Very old literary works, some dating from the commencement of the art of printing, were exposed to view on suitable tables. Microscopic specimens illustrative of bacterial pathology were exhibited by Dr. Heneage Gibbes. Music was also provided for the delectation of the Fellows and visitors. Altogether the occasion was decidedly a success, and reflects much credit on the trouble and energy displayed by the Secretaries, Mr. Pearce Gould and Dr. Kingston Fowler.

RESECTION OF THE RIBS IN EMPYEMA.

AT a recent meeting of the Paris Société de Chirurgie (April 23rd), M. Hermann, of Mulhouse, read notes of a case of multiple rib resection for an empyema which had existed many years. By means of an I-shaped incision, of which the central line corresponded to the axilla, he resected long pieces of the third, fourth, fifth, sixth, seventh, and eighth ribs, under strict antiseptic precautions. The result was not satisfactory, repair not taking place, so that ten weeks after the operation there was a large excavation exposing the diaphragm and lung covered by granulations. From this experience, Hermann agrees with Berger that it is well not to operate when the lung is firmly adherent posteriorly. Probably he would have obtained a better result had he contented himself with a less radical measure, or performed the resections at intervals instead of at one operation.

PROFESSOR STRUTHERS ON SCOTTISH UNIVERSITIES.

PROFESSOR STRUTHERS has been utilising the opening of the summer session at Aberdeen to show that its university is not far behind her renowned sister in Edinburgh not only in good buildings, lecture-rooms, laboratories, and museums, but also "in the baptism of the new spirit of the reformation," with which Signor Augusto Vera, Professor of the History of Philosophy in the University of Naples, had specially credited Edinburgh during the late festivities. Professor Struthers claims for his university particularly this merit, that she takes a sort of parental interest in individual students, sees that they work, tests the work which they do, and endeavours to keep them in good ways. We agree with him that such solicitude is well worthy of a university, and, indeed, that a university which does not or cannot exercise it is scarcely worthy of the name. We believe there is much truth in this claim of Professor Struthers. It is the more likely as the numbers are more manageable than at Edinburgh. Nevertheless, he probably underrates the care which is taken in other schools with regard to individual students. Judging from his speech, and still more from one he recently addressed to the members of the Medical Council, he evidently regards all proposals for legislation to be utterly unjustified by any imperfections or faults in Scotland. The only legislation that he can imagine to be proper would be such as would compel England to take Scotland for her model, or to shut up English schools and oblige all medical students to obtain their education and degrees in Scotland. He looks compassionately on the benighted state of our English schools with something of the spirit of that good Scotch minister who prayed for the people of the Greater and Lesser Cumbrays, not forgetting those in the adjacent islands of Great Britain and Ireland.

THE JURY SYSTEM.

THAT there is something to be said in favour of being tried by twelve of one's own countrymen cannot be denied, and it will rarely happen that all will agree to find a verdict opposed to the evidence. Wigan, a town in the centre of the Lancashire coal fields, and once notorious for its savage assaults by way of kicking, or "purring" in local parlance, appears to afford us an exception to the general rule. The miners here have a society which affords them relief in case of injury, and also makes some provision for the widows and orphans in case of death by accident. It is one of the most useful institutions in the country, and is ably managed by an energetic secretary, who, to a very large extent, was the means of its formation. Its operations are not confined to Wigan alone, but extend to most of the towns and villages in Lancashire and Cheshire where coal is raised, and it bears the expressive name of the "Lancashire and Cheshire Miners' Permanent Relief Society." Its funds are made up of contributions from the men, aided by subscriptions from the masters. Singular to relate, the men who are thus taught self-help and to help one another seek to convert every case of illness to a hurt in the mine. Quite recently a man fractured his leg, and was treated by the colliery surgeon successfully. He returned to his work and worked for a few days, when he was taken ill—all his illness being, of course, attributed to his fractured leg. He was eventually admitted into the local infirmary, where he died. An inquest was held by Mr. Rowbottom, the borough coroner, who ordered a post-mortem, and the cause of death was found to be phthisis; the jury in this case found a verdict according to the medical evidence. Quite different, however, was a case which occurred last week. A man was said to have met with a "strain," which produced orchitis. He worked for two days after, and then left off. He next suffered

from bronchitis, and cardiac disease, and its concomitant dropsy. The man died about ten weeks after receiving the strain; no one saw the injury produced. An inquest was accordingly held, and *four* medical men testified to the heart disease and dropsy; the medical attendant also spoke to the death being caused by exhaustion consequent on his illness; yet the jury, contrary to the sworn medical evidence and contrary to the summing-up of the coroner, returned a verdict of "Accidental death." Such verdicts are calculated to bring discredit on the coroner's court, they are not to the interest of the men themselves, and no society would be able to maintain the objects for which it was established were such findings the rule and not the exception.

DEATH OF A BRIDEGROOM.

A RECENT case of sudden death, the assigned cause being angina pectoris, occurring within a few days after marriage, is suggestive of wise counsels which may be given by medical attendants to their patients. Beyond question excitement of any sort is likely to "bring on" nervous disturbance, with muscular spasm and local congestion as consequences, in the case of a person predisposed to those states. If either a predisposition to functional disturbance of this sort, or organic disease, exists, the subject of either malady—for both conditions are morbid—should be warned against the peril that may be incurred by undue excitement. A man need not take a distressing view of his state simply because he is told to avoid or to mitigate the turbulence of his emotions. Surprise by joy, fright, or terror will in some cases destroy life by interrupting the normal course and performance of the vital functions. Let this possibility be calmly recognised, and care taken to prevent evil results by self-restraint and composure. It is always possible to put the facts before a patient in such a way as to avoid creating needless alarm, which is, of course, to be deprecated. It should, however, be understood that not only in cases of recognised disease of the heart or of the great vessels—perhaps even in these cases less than some others—there is a risk of an untoward contingency when the nervous system is so agitated by strong excitation of any particular centre as to disturb the harmony of its working. It is not necessary to discuss the question in greater detail; but the significance of the known facts, and the suggestion of the recent "accidental" death, are so marked as to call for notice.

CARPET-BEATING.

THE annual domestic revolution dear to housekeepers, and known by the name of "spring cleaning," has this year, owing to the cruel easterly winds, been deferred to an unusually late period. However, during the last few days, to judge from the uproar from carpet-beating &c. arising from every back yard and adjacent mews, the process is now in full swing. We have no wish to decry this periodic purification, but merely to point out rules for its better conduct and efficiency. The usual process in households, which cannot afford to have it carried out by special agency, is first to take up the carpets, and sweep the walls and ceilings, and then to wash the floors. Whilst the latter is drying, work must be found for the idle hands, and they cannot be better employed than in beating the carpets in the courtyard or back garden, a work attended with a horrid din and clouds of dust. It will be unavailing, we know, to complain of the noise—no appeal in this direction will gain a moment's sympathy; but we hope more attention will be paid to the other nuisance. When we reflect on the nature of the dust thus raised, we are surprised that sane persons allow to be thus stirred up under their noses all the nauseous accumulations of dining-room, bedroom, and stair carpets, to say nothing of door mats &c., into a fine dust, and which thus dispersed finds its way again into our houses in a form most readily accessible to our respiratory organs. Indeed, it is fortunate if the dust thus roused is only nauseous and not infective, since the desquamated cuticle of scarlet fever, the scabs of small-pox, the dried sputa of consumptive or whooping-cough patients, living parasites, and hairs from mangy cats and dogs may thus invade our rooms. Carpet-beating, we are aware, is forbidden in public thoroughfares; but it should, in any form, be prohibited within a reasonable distance of dwelling-houses; and for those who cannot afford to pay the small sum required to have their carpets and mats properly cleaned, the authorities should set aside some open space, to which on stated days and at certain hours persons might bring their carpets and have them beaten, without causing annoyance or danger to themselves or neighbours.

CEREBRAL MOVEMENTS.

THE Académie de Médecine of Paris has recently devoted its attention to the question of the movements of the brain *en masse*. It is difficult, perhaps, to assign a good reason for saying so, but the idea of coarse movement of the brain seems to approach somewhat to the absurd. M. Luys has endeavoured to show that there is a displacement of the cerebral mass within the cranial cavity in the direction in which the head is moved. When the clown walks on his hands head downwards the total brain is placed nearer to the vault. M. Sappey and others could not agree with the conclusions of M. Luys. They taunted him with transferring cadaveric facts to the living body. Sappey showed that the brain as a dead weight averages 1350 grammes, but as a physiological weight is only 45 grammes, because it is suspended in fluid. Moreover, he considers that the natural connexions of the brain are sufficient to compensate for this weight of 45 grammes. The cranial and spinal cavities are nowhere in communication with the surrounding atmosphere and, as nature abhors a vacuum, it is probable that every part of these spaces is sufficiently filled up with some material. It is fortunate, perhaps, that such is the case, else every time the head was shaken something like concussion would occur.

COMPULSORY NOTIFICATION AT BRIGHTON.

THE Town Council of Brighton have yielded to the pressure brought to bear upon them, and have abandoned the clauses in the Improvements Bill which deal with compulsory notification of infectious diseases. They were compelled to do so by the state of public opinion upon the question. The people of Brighton are quite determined to reject compulsory notification as a local measure. They think that it would place the town in an unfavourable position with respect to its rivals on the South Coast, none of which have as yet adopted the Act. And so strongly do they hold this opinion that any attempt to persist in the proposed legislation would be at once followed by indignation meetings and every kind of public agitation, the effect of which would be to stir up a great deal of unpleasant feeling. Recognising this, the authorities have yielded, against the advice of their Sanitary Committee. For this state of feeling some of the medical men of the town are primarily responsible. The agitation which has led to this result was initiated by them. It is only fair to say that they are by no means unanimous in the matter. But a majority of them, including some (locally) influential members of the profession, have from the first taken up a strongly antagonistic position to the measure; and they have found no difficulty in persuading their fellow-townsmen to join them in opposing it. They have been careful to say that it is not so much notification, even as a local

measure, that they object to, but compulsory notification. They ground their objection on the injury that it is supposed would be inflicted on a health-resort like Brighton by the publicity presumably entailed by compulsory notification. The advantages of the measure have not been allowed to weigh against the dread of scaring visitors away from the town.

INFANT MORTALITY AND UNCERTIFIED DEATHS.

THE death-rate of infants under one year of age has shown a decline in England and Wales in recent years, but the rate of the decline has not kept pace with the decline of mortality that has occurred among children above that age. It is impossible to doubt that many of the causes of infant mortality are traceable rather to negligence arising from ignorance and recklessness than to those conditions which are embraced by even a liberal interpretation of the term "sanitary condition." For an acceleration of the rate of decline of infant mortality we should look fully as much to the action of the coroner and the police as to that of the medical officer of health. Mr. Henry Armstrong, the medical officer of health for the borough of Newcastle-upon-Tyne, in a recent report upon the exceptionally high death-rate in that city, has called attention to the large proportion of deaths of infants under one year of age the causes of which are not certified either by a medical practitioner, or by the borough coroner in inquest cases. During the nine years 1874–82 the causes of no fewer than 842 deaths of infants in Newcastle-upon-Tyne were not certified, no inquests being held. This means that in more than 10 per cent. of the cases of deaths of infants at this age no registered medical practitioner had been in attendance during the last illness of the infant. This fact, taken in connexion with the extensive practice of burial club insurance among the working classes, suggests the necessity for some check upon the present lax system. Under the existing state of registration and burial law, it is to the coroner mainly that the public must look for assistance in supplying a wholesome check upon this waste of infantile life. The strongest influence should be brought to bear upon the coroner for Newcastle-upon-Tyne with a view to the holding of inquests respecting the cause of uncertified deaths of infants. It is worthy of note that during the last ten years no fewer than 16·7 per cent. of infants born in that town have died before completing their first year of age.

SANITARY AUTHORITIES AND THEIR OFFICERS.

DR. SADLER, Medical Officer of Health to the Borough of Barnsley, has had the courage to lay before the Town Council and the public circumstances as to the attitude of certain members of the Corporation towards himself in connexion with legal proceedings which were instituted, on his suggestion, as to a nuisance arising from a boiling-house attached to a pork-butcher's slaughter-house in a crowded situation in the centre of the town. The defence was taken up by a powerful trade association; it was, however, unsuccessful, a fine was imposed, and the matter was fully discussed in the local papers. But one feature of the case appears to have been passed over without any public comment. According to Dr. Sadler, the most active persons in the defence were members of the urban sanitary authority. Now Dr. Sadler, whilst admitting that these gentlemen have treated him personally with all desirable courtesy, regards it as significant that when he, as an officer of the authority, takes part in proceedings intended to protect the public health, and when in so acting he is opposed by the very men under whom he has to work, no remark whatever should be excited in the district by such a set of circumstances. That this should be possible—and it is so—not only in Barnsley, but elsewhere also, does certainly show a most imperfect appreciation by the inhabitants of the districts concerned as to the importance of the sanitary duties imposed upon an officer of health, and as to what is the right attitude of a sanitary authority towards their official adviser in matters relating to the health of their district.

SO-CALLED PNEUMONIC HEMIPLEGIA.

SCIENTIFICALLY the phrase pneumonic hemiplegia does not appear to be a good combination. But cases which have received this designation are nevertheless of some interest. Dr. H. Luc has given a brief account of an example of this combination of diseases in the *France Médicale* of April 23rd. Left hemiplegia supervened on the fourth day in a case of pneumonia of the right lung of a woman (age not mentioned) the subject of extensive atheromatous disease. The hemiplegia was of the ordinary cerebral type without affection of sensation, but with some impairment of the intellectual faculties. The tendency to the formation of fibrin is well known to be increased in acute pneumonia, and it is believed that this altered condition of the chemistry of the blood, together with the presence of disease of the arterial walls of the brain, gave rise to thrombosis of some part of the right middle cerebral artery. Five months after the onset of the hemiplegia, the only remains of the paralysis was a little deviation of the mouth to the right. It ought to be mentioned that a systolic murmur of doubtful site also appeared during the evolution of the pneumonia.

ROYAL MEDICAL BENEVOLENT COLLEGE.

THE beneficent objects of this charitable institution were warmly advocated at the anniversary dinner held on Wednesday night last, when Sir Joseph Lister presided. The proceedings were of a successful and agreeable character; several hundred pounds were contributed to the funds of the institution, and new friends were made both in and outside the ranks of the medical profession. In proposing the toast of the evening, Sir Joseph briefly sketched the aims of the Society. Certain annuities are granted to unsuccessful aged members of our profession or their widows; provision is made for the gratuitous education of their sons if that be necessary, or in some cases the fees for education are reduced to meet the means of those who are not able to afford the full charges. In addition to these excellent aims, a partially successful attempt has been made to assist the daughters of indigent medical men. As good wine needs no bush, so neither do the claims of this excellent organisation need special laudation.

SHEFFIELD INFECTIOUS HOSPITAL.

CONSIDERABLE success has attended the provision of a hospital for infectious diseases at Sheffield. The number of admissions is steadily on the increase, 210 patients having been received during the past year; and not only so, but as many as 147 of these were patients suffering from scarlet fever, a disease which has often been regarded as difficult to isolate in hospital because of the reluctance of parents to part with their children. The actual ages are not given in Dr. Willey's report, but it stated that the majority of these patients were under fifteen years of age. Twenty-seven small-pox patients were admitted, and of these two died—namely, one who only possessed marks of primary vaccination which were hardly visible, and one who was unvaccinated. The admissions also included eighteen cases of typhus, and the only disease contracted by any member of the staff was typhus, in the case of a nurse. This modern hospital, with its four detached pavilions, is evidently

serving its purposes well, and, apart from the mere isolation of patients, it also serves as a centre for the disinfection of infected articles in the borough.

CHOLERA ON BOARD H.M.S. "CROCODILE."

No official report has yet been made as to the circumstances attending the outbreak of cholera on board the troopship *Crocodile*, and such accounts as have been published differ in so many important respects that we defer any comments as to the outbreak until trustworthy details are available. In the meantime it is, however, evident that, having regard to the large number of troops and others which the ship carried, much credit is due to those on board who, under circumstances of real danger, so successfully took measures of precaution which prevented any further extension of the disease. In this connexion we would notice the services of Brigade Surgeon T. Rudd, A.M.D., Surgeon-Majors Scott, Hedge, and Gallway, under whose advice Captain Carr gave all the instructions which were requisite to ensure the safety of the men, women, and children in the vessel.

A HUMANE AND USEFUL INSTITUTION.

IT is stated that the Prince of Wales has consented to become a patron, and the Earl of Onslow has accepted the presidency, of the temporary Home for Lost and Starving Dogs. There is no doubt that this institution accomplishes in a quiet and unpretentious manner excellent work, not only directly in the saving of suffering to that four-footed animal which above all others is man's constant and most trusted companion, but indirectly by affording to the human community a safeguard, to some extent, against the spread of that terrible and as yet incurable disease—hydrophobia. We congratulate the Home on obtaining a president whose interest in the welfare of the canine race is well known.

MIRYACHIT.

UNDER this name Professor Hammond of New York has described what he regards as a new malady of the nervous system. The main feature of the disorder consists in the exact and uncontrollable imitation by the sufferer of any muscular action which comes within the range of his vision. It appears that there is no trickery in the phenomena, since if the act imitated be dangerous to life, the patient nevertheless performs the perilous deed. Cases of this malady seem to be common in Western Siberia.

MIDWIFERY FEE RECOVERED.

THE *Natal Mercantile Advertiser* reports an action in the Durban Civil Court by Dr. Bonnar for the recovery of a midwifery fee, though the patient had never sent for him. His contention was that the usage of the profession entitled the physician to his fee when a month's notice had not been given that the engagement was cancelled. The defence was that the plaintiff had sustained a fracture of the collar-bone and could not attend the case. His worship gave judgment for the plaintiff.

WHY NO MEDICAL EVIDENCE?

ON May 2nd an inquest was held at the Fort's Arms, Clayton-le-Moors, on the body of Mary Howson, aged fifty-two years, who was found lying on her bed with a cut in the throat. The deceased was last seen alive by her daughter at 11.30 P.M.; at 5.30 the following morning she was discovered dead. There was a wound an inch and a half in length across the throat. There was no blood upon the bed, but there was some on the floor, and near to it an open razor. The probability is that the deceased committed suicide, but this ought not to have deterred the coroner from calling medical evidence. What proof was there that the wound was self-inflicted? We are strongly of opinion that an inquest should never be conducted without medical assistance in a case of death from other than natural causes. Justice to the living, and respectful duty to the memory of the dead, alike demand it.

SCARLET FEVER AT WATERFORD.

OUR Dublin correspondent telegraphs that a serious epidemic of scarlatina has broken out at Waterford, and that at present there are nearly one hundred patients in hospital suffering from the disease.

THE Chancellor of the London University and the President of University College were entertained on Wednesday evening by the Lord Mayor at the Mansion House. Earl Granville, with his accustomed felicity, referred to the origin of the University, and to the liberal and non-sectarian principles on which it was based, and was followed in the same strain by the Earl of Kimberley, who spoke of the high appreciation with which he regarded the benefits conferred by University College on Indian students. Sir James Paget, Sir William Gull, and Lord Justice Fry were among the speakers on the occasion.

BUBONIC PLAGUE is reported to have appeared at Bedra, in the province of Bagdad. A sanitary cordon has been ordered by the Porte to be placed around the infected district.

DR. KOCH and the other members of the German Cholera Commission returned to Berlin on the 3rd inst. It is said that Dr. Koch will shortly be made a Professor of the Berlin University.

AS will be seen by an advertisement in another column, the latest date for the receiving of essays in connexion with the Alexander Memorial Fund is Dec. 31st, 1884.

SIR ERASMUS WILSON has resigned his seat in the Council of the Royal College of Surgeons of England.

OPENING OF THE INTERNATIONAL HEALTH EXHIBITION.

AT an early hour on Thursday morning a large number of persons had already congregated at the Health Exhibition. The representatives of the London and provincial press, including some lady reporters, were present at a nine o'clock breakfast, at which his Grace the Duke of Buckingham and Chandos presided. This was followed by a rapid tour round the Exhibition, conducted by the Duke of Buckingham, who gave information, in answer to numerous questions, on each point of interest. Among the exhibits that attracted the most attention during this preliminary inspection were the very graphic plans, models, and maps of the London Water Companies; the model of the old Roman baths discovered at Bath; the incubators for chickens, that suggested the *couveuses* used at the Maternity Hospital in Paris; and a set of under-garments in which thermometers are inserted to show what material is best suited to retain heat. Of course the "sensation" of the Exhibition, the street of old London, was universally admired, though it is not yet completed. On reaching the Royal Pavilion, the Duke of Buckingham quitted his guests, and about an hour's time was allowed for a stroll through the gardens.

Long before noon the spacious central gallery was crowded by those who were privileged to assist at the opening ceremony. All the members of the Executive Council were present, and the familiar features of Sir Cunliffe Owen, Sir Frederick Abel, Dr. George Buchanan, Captain Douglas Galton, and others were early recognised. It was not, however, till nearly a quarter past twelve that the band struck up the National Anthem to announce the arrival of the Duke of Cambridge. The crowd was so dense that the police had to make full use of their authority to clear a passage through those who, unable to obtain seats, were choking up the aisles. When the Duke of Cambridge reached the dais in the centre of the gallery, the members of the Cabinet ranged themselves in a row on his left hand, while the Lord Mayor and the Sheriffs in their robes of State, and the Foreign Diplomatic Corps, stood on the opposite side. First among the Ministers was Lord Carlingford, then Sir Vernon Harcourt, Sir Charles Dilke, Mr. Mundella, and finally, in the background, and almost concealed from view, Mr. W. H. Gladstone. Grouped at the foot of the dais we noticed, among many others, Sir Henry Thompson, Sir James Paget, Lord Aberdare, Sir Richard Owen, Lord Ducie, Edwin Chadwick, C.B. (wearing a suit of sanitary woollen clothing as devised by Dr. Jaeger), Professor Huxley, Dr. Lyon Playfair, Mr. George Godwin, and Mr. E. P. Spice, C.E.

After a moment's pause, his Grace the Duke of Buckingham, as Chairman of the Executive Council, delivered an address, which, in spite of the immense size of the gallery, was well heard throughout. This was premised by a telegram received from the Prince of Wales wishing all possible success to the Exhibition, and regretting deeply his unavoidable absence. The address then went on to point out that the first meeting of the Executive Council took place on the 3rd of November last, implying that the time for organisation had been exceptionally short, particularly as it was necessary to erect additional buildings, covering two and a half acres, and to supply steam power equal to 1365 horses for driving the machinery and producing electric light. But for the liberal support of the City of London and the aid of public-spirited men, this would have been impossible; an assertion which was received with cheers. The reproduction of the houses of the City, such as they stood three centuries ago, has been accomplished in less than six weeks. The lack of time explained the deficiencies in the foreign sections and some of England's dependencies. But, nevertheless, the exhibitors had come forward at heavy expense to aid the real and instructive aims of the Exhibition. "For those who seek to study the prepartions of various wholesome foods, to examine the difference between sanitary and insanitary dwellings, and to investigate how to maintain their houses in a healthy condition, with dry walls, good drainage, pure water, fresh air, and good light, ample scope will be found in the various exhibits of the several courts." With respect to dress, technical education, art and science schools, popular handbooks, and popular diversions, lectures, concerts, illuminations, &c., the programme was replete with numerous attractions, and the Duke of Buckingham concluded with the hope that the labour and expenditure incurred may secure for these objects more intelligent attention in the future.

In reply, and after apologising for the absence of H. R. H. the Prince of Wales, due to the lamented death of the Duke of Albany, the Duke of Cambridge expressed his warm concurrence with the endeavour to promote good health as one of the first conditions necessary to the happiness and prosperity of the nation. Acknowledging the vast amount of preventable misery in our midst, he urged that it was above all desirable to teach all classes how best to help themselves to ward off risks and injury to health. Few would visit such an exhibition without acquiring useful knowledge. The conferences and the display of the most scientific means of investigation would offer for discussion and research the best methods still to be adopted for the improvement of public health. After thanking those who had assisted in bringing about the admirable results already attained, His Royal Highness insisted on the international character of the Exhibition, and concluded with these words, which were loudly cheered throughout:—"It is certain that the promotion of health and education is a source of blessing to all nations. The knowledge which one nation possesses is, by exhibitions such as these, made accessible to all; and although this may be attended with competition and mutual rivalry, yet it need not produce hostility, but should promote mutual respect and goodwill; so that when I repeat to you my earnest wishes for the prosperity of the Exhibition, I feel that I am encouraging at the same time the blessings of peace and concord among all nations. It is with this earnest hope that this may be among its good results that I now declare this Exhibition open."

The band then struck up the march from "Tannhauser," and the Duke of Cambridge shook hands with all who had taken a prominent part in organising the Exhibition; while, much to the amusement of the spectators, Sir William Harcourt fraternised with some of the City magnates. Ultimately, however, a procession of a somewhat disorderly description was re-formed and, headed by the Duke of Cambridge, went through the machinery gallery, the historic dress collection, the aquarium, the Belgian Court, and finally came to a stand by the Queen's-gate entrance. Here a band of the Guards was stationed, and here the foreign commissioners were introduced to the Duke of Cambridge. With the exception of Dr. Martin, the Commissioner General for the French section, who said a few words, this ceremony was limited to the mere shaking of hands. The French commissioners have already issued a manifesto explaining that, as they were appointed after the delay for admission had already expired, their exhibits cannot be ready for another four weeks. But as we are promised exhibits from Dr. Pasteur's laboratory, from the town of Paris, the Observatory of Montsouris, from some of the most prominent French sanitary engineers and architects, this section will be none the less interesting on account of the delay.

All the introductions and congratulations being now terminated, the Duke of Cambridge took his departure, and the numerous company which had followed him to the gate dispersed. Thus the ceremony concluded; and when we left the Exhibition buildings the public was already crowding eagerly every department. The weather was dry, though overcast throughout, and the general satisfaction expressed on all sides may lead us to hope that this new effort to spread sanitary knowledge will meet with success and public support.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5733 births and 3804 deaths were registered during the week ending the 3rd inst. The annual death-rate in these towns, which had been equal to 20·4, 22·5, and 22·3 per 1000 in the three preceding weeks, further rose last week to 22·7. During the first five weeks of the current quarter the death-rate in these towns averaged 22·1 per 1000, against 22·6 and 23·6 in the corresponding periods of 1882 and 1883. The lowest rates in these towns last week were 15·0 in Hull, 16·5 in Leicester, and 17·3 in Cardiff. The rates in the other towns ranged upwards to 26·4 in Oldham, 27·0 in Plymouth, 28·5 in Leeds, and 29·3 in Wolverhampton. The deaths referred to the principal zymotic diseases in the twenty-eight towns were 546, showing a decline of 30 from the number in the previous week; they included 173 from whooping-cough, 172 from measles, 94 from scarlet fever, 36 from "fever" (principally enteric), 33 from diarrhœa, 21 from small-pox, and 17 from diphtheria. No death was referred to any of these diseases last week in Brighton, whereas they caused the highest death-rates in Leeds and Liverpool. The greatest proportionate mortality from whooping-cough occurred in Liverpool, Salford, and London; from measles in Portsmouth, Oldham, Leeds, and Norwich; from scarlet fever in Sheffield, Cardiff, and Preston; and from "fever" in Birkenhead and Newcastle-upon-Tyne. The 17 deaths from diphtheria in the twenty-eight towns included 11 in London, 2 in Birmingham, and 2 in Leeds. Small-pox caused 10 deaths in London, 4 in Liverpool, 2 in Hull, 2 in Sunderland, 1 in Birmingham, 1 in Sheffield, and 1 in Newcastle-upon-Tyne. The number of small-pox patients in the metropolitan asylum hospitals and hospital ships, which had rapidly increased in the six preceding weeks from 148 to 450, further rose to 502 on Saturday last; 107 new cases were admitted to these hospitals during last week, against 61 and 119 in the two previous weeks. The Highgate Small-pox Hospital contained 20 patients on Saturday last, 8 new cases having been admitted during the

week. The deaths referred to diseases of the respiratory organs in London, which had been 285, 318, and 327 in the three previous weeks, further rose to 360 last week, and exceeded the corrected weekly average by 10. The causes of 84, or 2·2 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the deaths were duly certified in Bradford, Plymouth, Derby, Bolton, and Cardiff. The largest proportions of uncertified deaths occurred in Leicester, Birkenhead, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 23·3 and 24·2 per 1000 in the two preceding weeks, was 23·8 in the week ending the 3rd inst.; this rate was 1·1 above the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns ranged last week from 16·3 and 19·5 in Dundee and Leith, to 27·3 in Glasgow, 27·7 in Paisley, and 28·0 in Aberdeen. The deaths in the eight towns included 93 which were referred to the principal zymotic diseases, against 96 and 91 in the two preceding weeks; 41 resulted from whooping-cough, 15 from measles, 15 from diarrhœal diseases, 10 from diphtheria, 7 from "fever," 5 from scarlet fever, and not one from small-pox. The rate from these diseases averaged 3·9 per 1000 in the Scotch towns, and exceeded by 0·6 the rate from the same diseases in the large English towns. The 41 deaths from whooping-cough in the eight Scotch towns showed a further increase of 10 upon the numbers in the two previous weeks, and included 24 in Glasgow, 6 in Edinburgh, and 5 in Aberdeen. The 15 fatal cases of measles exceeded the number in the previous week by 5; 5 occurred in Glasgow, 4 in Paisley, and 3 in Edinburgh. Eight of the 15 deaths from diarrhœal diseases were returned in Glasgow. The 10 deaths from diphtheria showed a decline from recent weekly numbers, and included 4 in Glasgow, 2 in Edinburgh, and 2 in Aberdeen. Of the 7 deaths referred to "fever" 2 occurred in Aberdeen and 2 in Leith; while the 5 fatal cases of scarlet fever were all recorded in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 109 and 116 in the two previous weeks, further rose to 122 last week, but were 10 below the number in the corresponding week of last year. The causes of 63, or nearly 11 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 23·0, 28·7, and 28·8 per 1000 in the three preceding weeks, further rose to 31·5 in the week ending the 3rd inst. During the first five weeks of the current quarter the death-rate in the city averaged 28·3 per 1000, whereas it did not exceed 21·2 in London and 22·1 in Edinburgh during the same period. The 212 deaths in Dublin last week showed a further increase of 18 upon recent weekly numbers, and included 19 which were referred to the principal zymotic diseases, against 19 and 16 in the two previous weeks; of these 8 resulted from scarlet fever, 5 from whooping-cough, 4 from "fever" (typhus, enteric, or simple), 1 from measles, 1 from diphtheria and not one either from small-pox or diarrhœa. These 19 deaths were equal to an annual rate of 2·8 per 1000, the rate from the same diseases being 3·6 in London and 3·0 in Edinburgh. The fatal cases of scarlet fever in Dublin, which had been 6 and 9 in the two previous weeks, were 8 last week. The 4 deaths referred to "fever" showed a further decline from the numbers in recent weeks, whereas the fatal cases of whooping-cough were more numerous than in any week since the end of February. Only 2 of the deaths resulted from violence, and 60, or 28 per cent., were recorded in public institutions. The deaths of infants had declined, while those of elderly persons showed an increase. The causes of 27, or nearly 13 per cent., of the deaths registered during the week were not certified.

THE RECENT HIGH DEATH-RATE IN NEWCASTLE-UPON-TYNE.

The medical officer of health for Newcastle-upon-Tyne, Mr. Henry E. Armstrong, in his report upon the recently increased death-rate in that city, appears to throw doubt upon the accuracy of its enumerated population in 1881, which is necessarily the basis of the official estimate of its present population. We doubt the expediency of his attempt to explain the undoubted high death-rate of the city by an assertion that its population is under-estimated, as such an attempt must necessarily tend to weaken his strong plea for more energetic sanitary action within the borough. It will be well, however, to consider his grounds for considering that the Newcastle census in 1881 was defective. He points out that the number of inhabited houses in the borough in 1881 exceeded those in 1871 by 3804; and that as the population of Newcastle in 1881 averaged 7·2 per house, the increase of population in the ten years 1871-81 should have been 27,388 persons, instead of only 16,916, as enumerated. Now, as the average persons per house declined from 7·8 in 1871 to 7·2 in 1881, it appears probable that a large proportion of the new houses built in the last census period were of the smaller class, with a low average number of residents. The method of census enumeration, moreover, refutes Mr. Armstrong's theory that the number of inhabited houses is more correct than the number of the population. The enumerated numbers of the houses, as well as of the population, are derived from the same source, the householders' schedules, and it follows as a matter of course that if any portion of the Newcastle population in 1881 was not counted, the houses in which they lived would also have remained uncounted. Another ground on which Mr. Armstrong asserts that the population enumerated in 1881 was below the actual population, is the fact that the excess of births over deaths in the ten years 1871-81 was greater than the enumerated increase of population. This certainly shows, if the census numbers are correct, that the emigrants from the borough during the ten years exceeded the immigrants; considering, however, the commercial depression that prevailed during the latter part of the decade there is nothing improbable in the natural inference from the official statistics—namely, that the excess of births over deaths was greater than the increase of resident population. In times of commercial depression there is an inevitable tendency among the labouring classes to migrate. Mr. Armstrong points out that if, as he supposes, the population of Newcastle-upon-Tyne in 1883 was 161,307 instead of the official estimate of 149,464, the true death-rate would be "about 2 per 1000 lower" than that based upon the Registrar-General's estimate. But let us consider what effect this increase of population would have upon the birth-rate. The birth-rate in Newcastle-upon-Tyne, as calculated by the Registrar-General, declined from 42·6 in 1876 to 36·8 in 1883. If, however, Mr. Armstrong's estimate of population were adopted, the Newcastle-upon-Tyne birth-rate in 1883 would be reduced to 33·9, a rate far lower than any recorded within the borough, and so low as to condemn the probability of Mr. Armstrong's estimate. Although we do not agree with the inference that the Registrar-General under-estimates the present population of Newcastle-upon-Tyne, we cordially endorse the suggestion that the true remedy for the difficulties that stand in the way of intercensal estimates of population is to take a more frequent census. There seems to be no sufficient reason why all large municipalities should not organise a local numbering of their population between the national censuses. The expense need not be great, and the value of the information for statistical purposes would be undeniable. Such a local census was successfully carried out in Barrow-in-Furness in 1874, at a cost of £20. It is well to bear in mind, however, that the experience of the result of local censuses in the large American cities is not entirely satisfactory.

SPANISH MORTALITY STATISTICS.

Spain now publishes, and has published for nearly two years, a monthly bulletin of vital statistics relating to the entire kingdom, which is in some respects superior to the periodical returns issued by any other nation. This monthly return cannot lay claim to the amount of detail contained in our own quarterly return issued by the Registrar-General, neither are its statistics presented in so intelligible a form as in the English return. It would be a manifest advantage, however, if an official return showing the mortality from infectious diseases, similar to this Spanish bulletin, could be published once a month in each country. The Spanish bulletin supplies this information, but the value of the return is much depreciated by delay in its issue; this delay is usually about two months after the close of the month to which it relates. The bulletin gives no clue to the registration machinery by which the facts are registered and transmitted to the Sanitary Department

of the Home Office, by which it is issued. It is not therefore easy to estimate the true value of the statistics. The following summary, however, of the twelve monthly returns for 1883 will at any rate afford some indication of the sanitary condition of this kingdom. The population is estimated at rather less than seventeen millions, and the birth-rate was equal to 26·9 and the death-rate to 24·3 per 1000 respectively. The birth-rate was 6·3 below, and the death-rate 5·0 per 1000 above, the rate that prevailed in England and Wales. Thus the increase of population by excess of births over deaths, which was equal to 13·7 per 1000 in England and Wales, was only 2·4 in Spain. The proportion of illegitimate births in Spain last year was 6·3 per cent., the English proportion being about 5 per cent. Small-pox was the most fatal zymotic disease in Spain last year, causing 16,903 deaths, against but 953 in England and Wales, which has a far larger population. This disease showed the greatest mortality in December, when 2374 fatal cases were reported. The principal zymotic diseases caused a death-rate of 5·2 per 1000 in Spain last year, while the rate from the same diseases in England did not exceed 2·2, or considerably less than half. Next to small-pox, measles was the most fatal zymotic disease in Spain last year; while the deaths from diphtheria and croup, and from diarrhœa and dysentery, showed a marked excess compared with those that occurred in England. Scarlet fever and whooping-cough, on the other hand, were less fatal in Spain than in England. In all more than 25 per cent. of the deaths in Spain last year were referred in the official bulletin to infectious diseases, excluding intestinal catarrh and simple cholera, which are not so classed. It is evident that a very large proportion of the high death-rate in Spain is due to zymotic disease. As regards infant mortality, the return shows that 114,491 deaths of infants under one year of age were returned in Spain last year, being equal to no less than 252 per 1000 of the births recorded. Now, infant mortality in England, measured in this manner, did not exceed 137 per 1000 last year. Infant mortality is invariably greater in warm than in cold climates; but the high rate of infant mortality in Spain, taken in connexion with the heavy death-rate from zymotic diseases, affords the clearest evidence of insanitary condition. The publication of this health bulletin, however, shows that health matters are not lost sight of by the Spanish Government, and it may be expected that the lesson it teaches will lead to sanitary progress.

THE SERVICES.

THE SOUDAN CAMPAIGN.

In General Graham's despatches, published in the *London Gazette*, appear the following remarks respecting the conduct of officers of the Army Medical Department during the late campaign in the Soudan:—"The Army Medical Department, under Deputy Surgeon-General McDowell, was most ably administered, and the wants of the wounded carefully provided for and promptly attended to. As soon as we were in possession of the position at El Teb on the 29th February, about 4.25 P.M., I signalled to Fort Baker, at the instance of Deputy Surgeon-General McDowell, for tents, medical comforts, &c., to be sent on immediately. As mules had been kept ready laden, the convoy, under Surgeon Prendergast, arrived at 6 P.M., and the serious cases were at once placed under cover for the night. Additional blankets were provided for the slighter cases, which were kept in the open. Immediately after the action Surgeon-Major Connolly, who was principal medical officer of the Cavalry Brigade, by my orders took out eight mule cacolets with a cavalry escort, and proceeded over the ground where the cavalry had charged to make sure that no wounded were left, and, as far as possible, to bring in the dead. After the action of Tamai the wounded were at once brought into the zeriba, and promptly attended to. As the Surgeon-General remarks in his report, 'Though many of the wounded had injuries of the severest form, still we had no deaths from hæmorrhage, a fact which exhibits in the strongest light the skill and attention of the medical officers working under the most trying circumstances.' The following medical officers are especially brought to your notice for their care and attention to their important duties in the field on the occasion of the actions at El Teb and Tamai:—Surgeon-Major Wilson, principal medical officer of the Infantry Brigade; Surgeon-Major Connolly, principal medical officer, Cavalry Brigade; Surgeon Prendergast, who was badly wounded while attending a wounded man at Tamai; Surgeon-Major Catherwood, principal medical officer at the base, and Surgeon-Major Greene at El Teb; Surgeon-Major Venour had charge of the sick on hospital ship at the base (H.M.S. *Jumna*), and assisted by a detachment of the Army Hospital Corps, made every possible provision for the care of the wounded on their passage to Suez. I also beg to bring to your notice the services rendered by the Army Hospital Corps."

ARMY MEDICAL DEPARTMENT.—Brigade Surgeon Joseph Watts is granted retired pay, with the honorary rank of Deputy Surgeon-General. Surgeon-Major Thomas Wright is granted retired pay, with the honorary rank of Brigade-Surgeon.

MILITIA MEDICAL DEPARTMENT.—Surgeon Alfred Ashby, 4th Battalion, the Lincolnshire Regiment, to be Surgeon-Major.

ADMIRALTY.—In accordance with the provisions of Her Majesty's Order in Council of April 1, 1881, Surgeon Alexander William Watson Reid, M.B., has been placed on the retired list of his rank.

The following appointments have been made:—Staff Surgeon William H. Stewart, to the *Pembroke*, for Chatham Dockyard; Surgeon Donald F. Hoskyn, to the *Wanderer*.—Fleet Surgeons: Henry N. M. Sedgwick, to the *Excellent*; John Shields, to the *Agincourt*.—Staff Surgeons: James D. Smith, to the *Unicorn*; Henry Scanlan to the *Alexandra*, additional for service with Marines in Egypt.—Surgeon Leonard H. Kellett, to the *Alexandra*, additional for service with the Marines in Egypt.

ARTILLERY VOLUNTEERS.—1st Banff: William Beddie, Gent., M.A., M.B., to be Acting Surgeon.—3rd Lancashire: Arthur Jones, Gent., to be Acting Surgeon.

RIFLE VOLUNTEERS.—5th Durham: Acting Surgeon Charles James Sutherland is appointed Lieutenant.—2nd Volunteer Battalion (the East Yorkshire Regiment): Acting Surgeon David Ridpath, M.D., resigns his appointment.—1st Surrey (South London): Acting Surgeon William Riddell Brunton to be Surgeon, and is granted the honorary rank of Surgeon-Major.—6th Lancashire (1st Manchester), Charles Adam James Robertson, Gent., to be Acting Surgeon.

Correspondence.

"Audi alteram partem."

"REVACCINATION."

To the Editor of THE LANCET.

SIR,—Lest I should be misunderstood, will you kindly grant me space for a few more words on the subject of revaccination. I did not criticise the views expressed in THE LANCET on merely theoretical grounds, but in consequence of the result of careful observation on myself and others. Take my own case. I was thoroughly vaccinated in infancy on both arms, and have typical marks on each. All attempts at revaccination have failed to produce any effect upon me, though the operation has been performed ten or a dozen times, and in two or three instances from arm to arm. I have been exposed several times to virulent small-pox without taking the disease, or I am protected alike from variola and vaccinia, and there must be many other cases like my own. Hence I contend that complete protection from small-pox is not only compatible with insensibility to the vaccine virus, but largely dependent upon that condition. I freely admit that the majority of revaccinations for the first time will "take," but *not all*; and of those who "took" at the first revaccination, comparatively few will take at the second. I do not believe that the *genuine* effects of the vaccine virus can be reproduced indefinitely in anyone, though it may require several repetitions of the operation in some persons before the desired immunity is obtained. I am quite aware that one "successful" (so-called) revaccination

is practically a sufficient safeguard against small-pox; but I again assert that for *absolute* protection against the disease, nothing short of *absolute* insusceptibility to the vaccine virus will suffice.

Your obedient servant,

Harley-street, W., May 3rd, 1884. JULIUS POLLOCK.

*** There is not much practical difference between us and Dr. Pollock. He is to be congratulated on an *exceptional* insensibility to vaccine or variolous influences—thanks perhaps to his thorough primary vaccination,—perhaps constitutional. But his exceptional case by no means affects the rule.—ED. L.

To the Editor of THE LANCET.

SIR,—Your excellent article in THE LANCET of April 26th and the letters of Dr. Pollock and Mr. Goude on the above subject are, especially interesting to me, as I am now attending a case of variola in a woman who was assured of her safety and allowed to travel from Durham to Norfolk a day or two after the death of her husband from petechial small-pox, because a revaccination performed on her at the commencement of his illness had failed to "take."

One is so frequently questioned as to the test value of an unsuccessful revaccination that the following facts may be of some use in support of your expressed opinion that "revaccination which does not vaccinate is to be regarded with extreme dissatisfaction." The inference from them appears to me to be that failure is more often due to the operator than to the patient, and that it is unfair to give up those who do not take even after "they have been vaccinated with lymph direct from the arm" or even from the cow, unless the inoculation has been extremely carefully performed.

My partner being a strong anti-revaccinationist, with his consent I set myself during the severe epidemics of variola-phobia of 1871-72 and 1881 to prove him wrong, to show that most of his failures might be made successes, and that a former successful revaccination, unless within ten years or so, was not absolutely protective against another. Here let me state that I considered no case successful unless some vesiculation, pustulation, and scabbing, with more or less intense surrounding inflammation and constitutional disturbance followed the vaccination. That all the patients were private patients or their servants, and therefore could be carefully watched. That the inoculation was in every case performed by rubbing the lymph, either dry from points or recent from the arm, well into an abraded surface, formed by careful shallow scarification. And that in no case was less than one minute expended over each point of inoculation. Of the first series of 381 cases in 1871-72, 282 succeeded the first time; 81 failed and were not redone; 1 failed once, but succeeded the second time of trial; 6 failed twice and were not redone; and 11 were not personally inspected by me. Of the second series of 110 cases in 1881, 85 succeeded the first time; 10 failed once, but succeeded the second time of trial; 1 failed twice, but succeeded the third time; 1 failed seven times, but succeeded the eighth time; 6 failed once and were not redone, but of these I had successfully re-vaccinated two in 1872; 5 failed twice and were not redone, but one of these I had successfully revaccinated in 1876 and two in 1874; 1 failed three times, and was not redone, having been done with Belgian calf lymph; 1 gave a doubtful result. These cases included both sexes and all ages from puberty, and numbers of previous revaccinations. Twenty-three of the successes in 1882 had been revaccinated successfully by me in 1872, and many stated that they had been revaccinated successfully by the medical men, one lady acknowledging to at least ten occasions, and showing an arm mottled with scars. I myself had a mild attack of variola in 1868, and in 1872 attempted unsuccessfully to revaccinate myself an unlimited number of times; an immunity of only temporary duration, as I found to my cost when attempting a similar experiment in 1881, but which appears now to be re-established, as two scarifications performed this week on separate days, and from different children, have come to nothing.

I am, Sir, yours obediently,

ALAN REEVE MANBY,

East Rudham, May 5th, 1884. Public Vaccinator.

MEDICAL LEGISLATION: A GOOD EXAMPLE.

To the Editor of THE LANCET.

SIR,—I share the zealous wish of a decided preponderance of my fellow practitioners, and others besides, that the ordinary avenues which conduct into the profession might forthwith be stopped, and that hereafter the State itself might take custody of the sole desirable gateway through which new practitioners shall pass. To this end I have addressed to both members of Parliament for Blackburn a letter, of which the following is a copy:—

"Blackburn, April 29th.

"MY DEAR SIR,—There is a subject of pressing necessity at the door of the House of Commons, and it has as its basis the well-being of the public in its sanable aspect. That subject is not less, and none other, than the Medical Bill advocated by Her Majesty's present Government. Twenty bodies are to-day doing in a sort the work of one—or three at most, given one for each division of the kingdom—in licensing, on purpose to a man's enabling himself to get registered as a practitioner of the healing art. As was lately declared by Lord Carlingford, in his place within the House of Lords, the system now prevalent for the licensing of medical men gives not to the public the steadfast security it looks for in persons of this class exercising the calling with adequate ability and sufficient training, though they be armed with a statutory right to do so. That feeling of insecurity is found substantially to be owing to the privilege of conferring licences being left in the hands of various bodies independent of each other, acting under very mythical and ill-defined responsibility, and each, too, with the sensation of competing against the other nineteen, and (for it is beyond the shadow of a doubt) competing in a downward direction. Reluctant, Sir, as is the writer to encroach any further upon your valuable time, he yet would respectfully urge you, in conclusion, to exert your influence on each side unto the passing *at the earliest possible date* of a measure at once wise, laborious, in favour with the body professional, and of inestimable good to the public. Let the non-English clamour of vested rights on the part of any medical or surgical corporation be—I do not say totally disregarded, but—appraised in any event at its rational value, which would be indeed trifling when compared with the intrinsic excellence of the Bill almost all are hoping soon to see passed into law."

From Mr. Codrington, M.P., the reply was the following:—"I shall be very glad to give the Medical Bill every attention when it comes before the House."

And from Mr. Briggs, M.P., there came the following note:—"Many thanks for your letter, which I will not forget."

Finally, Mr. Editor, I have reason to feel, from what I know of these gentlemen, that the voice from Blackburn will have been hearkened to. Yours truly,

Blackburn, May 3rd, 1884. WALTER GARSTANG.

*** We hope all medical practitioners will write to their representatives in Parliament urging them to support the Bill.—ED. L.

PROPOSED CHANGE IN THE REGULATIONS OF THE UNIVERSITY OF DURHAM.

To the Editor of THE LANCET.

SIR,—In reply to your correspondents "M.D. (BRUX.)" and "K.T.L." in THE LANCET of April 26th, I shall be obliged if you will allow me space in your valuable journal to state that a movement is on foot for presenting a petition to the University of Durham praying that all members of the profession of ten years' standing may be eligible for the examination for the degree of M.D., without any restriction as to age—at present only those who are forty years of age are allowed to graduate without residence. A large number of signatures has already been obtained, but it is desired that all who are in favour of the proposed change and wishful to avail themselves of the privilege shall sign, as the memorial will have weight proportionate to the number of those who support it.

I need not state the reasons that have led to this movement; it is a fact that a large number of doubly qualified

men who have studied elsewhere than at a university are desirous of obtaining a degree in medicine, which under present regulations they are unable to do until they are of an age at which its possession or not is of very little importance.

This it is sought to ameliorate by the change before referred to, and as it is very desirable that all who approve the movement shall sign the memorial, even if unable for a year or two to avail themselves of its privileges, I shall be glad to receive the names both of those who are now eligible for the degree, and also of those who, intending to graduate at Durham, have yet a few years to wait before they are of sufficient standing.

I am, Sir, your obedient servant,

Leigh, Lancashire, April 28th, 1884. B. JONES, Hon. Sec.

*** We see little objection to the proposals of our Correspondent, provided that the character of the examination is maintained.—ED. L.

THE ASSOCIATION OF MEMBERS OF THE ROYAL COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—Will you kindly insert in your next issue the enclosed copy of a letter addressed to the Hon. Sec. of the Association of Members of the Royal College of Surgeons.

I am, Sir, yours faithfully,

Dorset-square, May 5th, 1884. WILLIAM HICKMAN.

[COPY.]

To the Hon. Sec. of the Association of Members of the Royal College of Surgeons of England.

DEAR SIR,—Will you please withdraw my name from the Association of Members of the Royal College of Surgeons of England. When you were kind enough to urge my joining the Committee of the proposed new Association, I understood that other Fellows of the College had consented to act on it, and that the Association would be representative of the Fellows and Members generally. Under present circumstances my presence on the Committee might be misconstrued, and I should be very sorry to take up a position which could, under any possibility, be considered as one of antagonism to the Fellows.—I am, dear Sir, yours truly,

WILLIAM HICKMAN, F.R.C.S. Eng.

1, Dorset-square, N.W., May 5th, 1884.

SCARLET FEVER.

To the Editor of THE LANCET.

SIR,—I have been surprised at some of the opening remarks of Mr. Cripps Lawrence in his discussion on Scarlet Fever at the Harveian Society of London, as reported in THE LANCET of the 3rd inst., p. 801. He speaks of the reproduction of the disease by the injection of scarlatinal blood into healthy animals, and the power of propagation possessed by the inoculated variety of the disease; and then he goes on to refer to "the chief characteristics of the scarlatinal poison," foremost among which he places "its volatility." As scarlet fever is a disease in which I have for many years taken much interest, I shall be greatly indebted to Mr. Cripps Lawrence if he will refer me to the evidence in support of his statements. I have repeatedly tried to produce scarlet fever in animals, and signally failed on every occasion—so signally that I have come to regard scarlet fever in animals as entirely different from the human disease. Then as to volatility being foremost among the characteristics of the scarlatinal poison, I take it that such information as we have regarding the poison all tends to indicate that it is particulate, and incapable of being volatised without being destroyed.

I believe that scarlatina being ordinarily classed with measles, rötheln, &c., is a mistake—it has little in common with such diseases. The diseases it is most closely allied to are diphtheria and idiopathic erysipelas. All three diseases are much influenced by insanitary surroundings, though all are contagious and they probably all *may* arise *de novo*, and the *post partum* state appears especially to attract them. In all, the incubation period is short.

I am, Sir, &c.,

FRANCIS VACHER.

Birkenhead Fever Hospital, May 7th, 1884.

"THE VIRUS OF CHOLERA."

To the Editor of THE LANCET.

SIR,—You refer in last week's issue to some investigations recently made by Dr. Vincent Richards on cholera virus, an inaccurate report of which has appeared in some papers. As you state, the true nature of Dr. Richards' experiments "has been misapprehended." They do not relate to the discovery of any bacillus, but to a poison of chemical nature. I have just received a letter from Dr. Richards in which he says, "I have just been rather successful in some investigations into the nature of choleraic alvine discharges. I find they contain a fearfully virulent poison. I will send you a reprint of my article on the subject. This confirms what Macnamara observed once in regard to the poisoning of several people who drank water containing choleraic discharges. The poison acts in a most marvellous manner on pigs."

When Dr. Richards sends me the promised article I shall have the pleasure to make a further communication on the subject. In the meantime this short statement may remove some doubts as to the nature of the investigations, which you, Sir, have properly apprehended to be of a chemical, and not of a bacillary, character.

I am, Sir, yours faithfully,

R. NORRIS WOLFENDEN.

Upper Wimpole-street, May 5th, 1884.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

To the Editor of THE LANCET.

SIR,—I have just received my voting paper for the Royal Medical Benevolent College at Epsom, and find that out of seventy-three candidates, forty are said to have been left "unprovided for"—"totally," "entirely," or "wholly." Of this number of forty, nine might have been widows or children of members of the Society for Relief of Widows and Orphans of Medical Men, the fathers living within a radius of twenty miles of Charing-cross, upon the payment of but two guineas a year, when their widows and orphans would have been entitled to some provision. It appears useless to attempt to help those who will not take the means of making some provision for their widows and children in case of early death. Not one in ten of those eligible as members of this Society avail themselves of its advantages. It cannot be wondered at that the profession are apathetic in their support.—I am, Sir, yours &c.,

May 3rd, 1884. AN OLD MEMBER OF THE SOCIETY.

NEWCASTLE-ON-TYNE.

(From our own Correspondent.)

SEVERE SURGICAL CASE IN COLLIERY PRACTICE.

I HAVE seen a case here in the practice of Mr. F. F. May, surgeon to the Elswick Colliery in this city, which illustrates the serious nature of surgical cases met with among miners. Mr. May was called to see the case on the evening of March 27th last. A collier boy aged fifteen, in attempting to enter a cage, used for drawing up men and coals, while it was in motion, was dragged up by it before he had quite entered. The ulna and radius of the right arm were found to be fractured in the lower third; there was a compound comminuted fracture of the right tibia, and a simple fracture of the right fibula just above the external malleolus; the whole of the integuments encircling the right leg from the middle were torn off, with the entire sole of the foot. The integuments of the dorsum were found in the stocking which he was wearing, with all the toes. On the inner aspect of the left thigh was a large irregular-shaped wound, measuring in the long axis of the thigh five inches and a half; its widest breadth being five inches, narrowing to four inches and a half and three inches and a half; a large flap of the integument was nearly detached and reflected, which was loaded with

particles of coal and dust. This large wound included Scarpa's triangle, and exposed the muscles, the fascia having been all torn off. The sartorius was torn across, and its upper portion had forcibly retracted, and bore very much the shape and size of a large femoral hernia. The lower portion of the muscle had retracted to the border of the lower part of the wound. Mr. May thought the pectineus was likewise torn across. Between these muscles about three inches of the femoral artery was seen; and, to ascertain if it were injured, Mr. May placed his fingers under it and gently lifted it up, but he was satisfied that it was intact. The boy when seen had lost much blood, and was faint; a field tourniquet was applied, and a little brandy given. The treatment was commenced by immediately dressing the wound of the thigh, cleansing it, and uniting the muscles by sutures, &c., under antiseptic precautions. In these steps Mr. May was assisted by his neighbour, Mr. Slater, surgeon, of Rychill. This injury was caused by what is called "the skeats," constructed of wood and iron, and having a pointed end, which point enters into an eyelet-hole at the side of the cage to steady it as it ascends. This point entered the thigh, and, the boy being dragged up by the cage, caused the extensive lacerated wound. In three days black spots appeared in the flap, which rapidly sloughed, so that it became necessary to remove the whole of it. The lad now rallied considerably, and began to take his food well. As to the right leg, it was amputated below the knee, and has done well; a small portion of tibia had exfoliated, and came through an ulcerated wound, which is now filling up; at the present time the wound of the flaps is about healed, and he has a well-formed stump. On April 25th the lad was wheeled out of doors in a perambulator, and was all the better for it, for his residence was as bad as it could be under any circumstances. Even in the daytime it was necessary to use a candle in dressing the wounds, and from the surroundings of the house very little fresh air could possibly find its way into the cellar where the boy lay. The wounds were dressed twice a day with iodoform wool and carbolic acid; no other antiseptic measures were taken. The wound of the thigh is now very much lessened, and the sartorius is united; the other muscle did not unite, but appeared to become part of the others that were exposed, and presented a solid muscular mass. Mr. May expects that in a week or so the wound will be quite closed. He says he is bound to speak in very high terms of the great assistance given by one of the nurses of the Cathedral Institute gratuitously, and of comforts and sick-room requisites supplied by that society. I may here advert to the need there is of a cottage hospital in proximity to a large coal company like that of Elswick, for the workers are at all times liable to severe accidents.

NORTH SHIELDS AND TYNEMOUTH DISPENSARY.

From the report of the North Shields and Tynemouth Dispensary just presented, the number of patients relieved reached 5801, at the very modest expenditure of £294. With regard to the question of a hospital for Tynemouth and North Shields, the committee say that they "are fully aware of the importance of a hospital for the borough, but without largely increased subscriptions they do not feel that they would be justified in entering upon the work, which would probably have the effect of crippling the operations of the dispensary." There is some fear, however, that the committee are too cautious, a hospital being admitted as an urgent requirement of their rising borough, and they might very fairly make a commencement at once, seeing that they have invested funds to nearly £2000 in amount.

SUICIDE FROM OVER-STUDY.

A very sad occurrence took place near this city the other day. A young man, aged eighteen, residing with his parents, and who was engaged as a pupil teacher at Sir Wm. Armstrong's school, left his home in the evening for the purpose, as was supposed, of attending school; but his sister, who had occasion to enter a hen-house on their premises, found her brother lying dead, having shot himself through the heart with a pistol. The medical man who was called stated that death had taken place several hours before his arrival. It is stated that the unfortunate young man had recently studied for a Civil Service examination, but had failed to pass, and this having preyed upon his mind, together with the effects of over-study, had affected his reason.

Newcastle-on-Tyne, May 7th, 1884.

EDINBURGH.

(From our own Correspondent.)

THE SUMMER COURSE OF LECTURES.

THE summer session commenced on Thursday, May 1st. As yet it is difficult to form an opinion as to the prospects of the session, but so far as can be judged the number of students is fully up to the average. Several of the professors in their introductory lectures alluded to the Tercentenary Festival, and congratulated the students on the successful part which they had taken in the proceedings. Professor Maclagan's introductory was particularly interesting. After remarking that he had not been in the habit of giving introductory lectures, but that the circumstances of that day were exceptional, Professor Maclagan went on to congratulate the students of medicine on now having the whole lectureships in their Faculty transferred to this pile of buildings, at once so commodious in their internal arrangements, and in such proximity to that essential part of the outfit of a medical school—the infirmary. Did he not say a few words at the present juncture he might appear to be wanting in his recognition of the liberality of that generous public which had now placed his colleagues and himself in such favourable circumstances for teaching. Such indifference, he was sure, was far from the heart of everyone who was in any way connected with Edinburgh, either as a city or as the seat of the largest medical school in Europe. All must stand astonished at the outcome of liberality which the neighbourhood in which they now were presented. It was a marvellous thing to think that within the short period of about fifteeen years there should have been erected among them the splendid infirmary at a cost of £300,000, and the buildings for their medical school at a cost of £250,000. All that was the outcome of public liberality, with the exception of £80,000 granted by the Government for the latter purpose. He could not help availing himself of this opportunity of saying how much he should rejoice if those who had the disposal of the fund which had been raised to erect a memorial to the late Duke of Buccleuch could see their way towards acting upon the suggestion of Principal Shairp of St. Andrews, that this money should be employed in the erection of a college hall, which under the designation of the Buccleuch Hall, would serve as a worthy record of that justly esteemed nobleman and true Scottish patriot, who was one of the most liberal contributors to their university buildings extension fund. Addressing himself to the question of what was meant by medical jurisprudence, Professor Maclagan observed that it might be more briefly, and not less correctly, described according to the expression used in Germany as State-medicine, and might be defined to be the application of the science of medicine to the maintenance of public order and of public health, than being thus constituted two distinct branches into which the subject was divided. Nobody would say that medical jurisprudence was of so much practical importance to them as medicine, surgery, and midwifery; but they ought to bear in mind that, although not so directly profitable to them, it ought to receive their attention, because it stood in this peculiar contrast to the other practical branches of their profession, that their engaging or not engaging in it did not depend upon their own will. They might be compelled to practise it. If they should by any chance be brought into contact with a case, surrounded with elements of suspicion, and leading to judicial inquiry, a coroner or a procurator-fiscal might summon them on the part of the public authorities to evidence as medical men, and this they could not refuse to give do. In conclusion, Dr. Maclagan, as the first professor who had spoken *ex cathedrâ* since the celebration of the Tercentenary of the University, congratulated the students on the complete success of the whole of the festival. He believed that among them the Tercentenary meeting with their distinguished guests would not become merely the memory of a brilliant day, but that it would continue to be an active leaven leavening the whole lump, causing them to feel more than ever how incumbent it is, while students, to pay earnest attention to every department of professional knowledge, and faithfully to prepare themselves for the duties of practical life and for maintaining untarnished the reputation of their *alma mater*.

NEW LECTURES IN THE EXTRA-ACADEMICAL SCHOOL.

Dr. Bruce takes Dr. Buist's place as Lecturer on Pathology and Practical Pathology in the College of Surgeons, and Dr. G. Gibson is to lecture on materia medica and therapeutics at Nicholson-square.

APPOINTMENT OF A DERMATOLOGIST TO THE ROYAL INFIRMARY.

The managers of the Royal Infirmary have appointed Dr. Allan Jamieson Extra Physician for Diseases of the Skin. This appointment is in every way a good one, and it is to be earnestly hoped that a sufficient number of beds will be allotted to Dr. Jamieson, to enable him to organise and conduct a skin clinique adopted to the large requirements of the medical school.

GLASGOW.

(From our own Correspondent.)

MEMORIAL FOUNTAIN TO THE LATE DR. JOHN AITKEN, GOVAN.

THERE has just been inaugurated in Govan, Glasgow, a drinking-fountain erected in memory of the late Dr. John Aitken, who was a native of the district, and had practised in it for over twenty years. He died in the spring of 1880, at the comparatively early age of forty-one years. Dr. Aitken was devoted heart and soul to his profession, and is believed to have died, like so many more, a victim to over-work. He endeared himself to all in his district, both rich and poor; indeed, a few years before his death his townsmen showed their appreciation of his services by presenting him with a horse and carriage. The fountain now opened will perpetuate the memory of a good and faithful physician.

SMALL-POX.

The outbreak of this disease in Glasgow seems to be dying out, only twelve new cases having been registered in the past fortnight, as compared with twenty-one in the fortnight preceding. Complaint is still made as to the reluctance or neglect of some medical attendants to give notification of the disease to the sanitary authorities, and in connexion with this the following incident is related in the city medical officer's report:—"In the last week of March the daughter of a widow, who lives in a respectable part of the city and keeps lodgers, took ill of an eruptive disease, which the doctor is reported to have called 'cow-pock.' In a fortnight thereafter a son, aged twenty-one, was seized with a disease which the doctor recognised to be small-pox The house contains five rooms and a kitchen. It is on the first landing of a common stair, on which five other families live, two on each landing. The inmates were a lady, who hired a bedroom and parlour, and was superintendent of a day nursery for children, in which unvaccinated infants from the earliest age are received; a helper to a clergyman, who had one room; the son, aged twenty-one, who lay in another room, ill of small-pox; leaving one room and the kitchen for the mother, her daughter, aged fifteen, who had small-pox; another daughter, aged seventeen, who was employed in a photographic establishment; another, aged twenty-five, who was employed as a cook in the day nursery; and a son, aged twenty-three, employed in a shop. No one in the house was revaccinated. The lodgers were not told what was the matter; but, in fact, were misled. The cook went to the day nursery as usual, and we owe our first intimation of the case to the intelligence of a poor washerwoman, who was sent for to do the infected washings in the common washing-house." If the sanitary authorities are to be expected to cope with such a disease as small-pox, they must have more disinterested support from the medical attendant than was displayed in the above instance.

The report that small-pox had broken out on board the training ship *Cumberland* is incorrect; the disease turned out to be measles.

EXTRA-MURAL TEACHING IN ARTS.

The proceedings of the Glasgow University General Council are not usually very interesting. The last meeting, however, was enlivened by a motion proposed and ably supported by Dr. D. C. M'Vail, to the effect that extra-mural teaching should be recognised in arts as well as in medicine. This motion was defeated, and the university now stands in the anomalous position of holding that a system of extra-mural competition which has proved so beneficial to the Faculty of Medicine, both in Glasgow and in Edinburgh, would be injurious to the Faculty of Arts.

The operation of excision of the larynx was performed a short time ago, in the Glasgow Royal Infirmary, by Dr. W. Macewen.

IRELAND.

(From our own Correspondent.)

ROYAL COLLEGE OF SURGEONS.

A MEETING of the Fellows will be held on Monday, the 2nd prox., for the purpose of electing a President, Vice-President, Council, and Secretary for the ensuing year. The present Vice-President, Mr. E. H. Bennett, will in due course be promoted to be President, and the Vice-Presidency which he vacates will, there is little doubt, be filled by the selection of Mr. A. H. Corley, surgeon to the Richmond Hospital, and lecturer on Surgery in the Carmichael Medical College. For seats on the Council, besides the outgoing Councillors, there are Messrs. Tagert, W. A. Elliott, Carte, Nixon, Fitzgibbon, Meldon, Story, and Stokes. It is very gratifying to the numerous friends of so distinguished a surgeon as Mr. William Stokes, surgeon to the Richmond Hospital and Professor of Surgery in the Medical School of the Royal College of Surgeons, that he is this year a candidate for a seat on the Council. He will unquestionably be elected, and it is to be hoped that he will allow himself to be nominated as Vice-President for 1885. Among the other candidates for Council, Mr. Elliott will probably rank next to Professor Stokes, and I shall be surprised if he is not returned on this occasion. He lost his seat last year by only one vote, and the Fellows, I believe, will reinstate him in his former position on the 2nd of June next. All the members of the Surgical Court of Examiners were re-elected last Tuesday for the ensuing year, a result which was not altogether unexpected, when the conservative tendencies of the electors—the Council—are considered. On this occasion, also, the voting was open, and not by ballot as previously.

ROYAL UNIVERSITY OF IRELAND.

A suggestion has recently been made that the Senate should be induced to hold the Second Arts Examination in centres, such as were fixed for the First Arts Examination last year. Should this arrangement be carried out, it will save considerable inconvenience and expense to those residing at a distance from Dublin. It has been pointed out in support of the proposal that the Intermediate Examination of the London University is carried on at centres, and only those candidates go to London who require to pass an examination in the subjects of botany and zoology. Those going up for honours would necessarily have to proceed to Dublin, but for the majority of candidates for the Second Arts Examination the various centres as arranged for the First Arts Examination would answer all purposes, and be most acceptable to a large number of students.

QUEEN'S COLLEGE, CORK.

The visitation for this College, which opened on the 5th inst., will be held by the Lord Chancellor of Ireland, the Duke of Leinster, Dr. Moore, President of the College of Physicians, and the President of the Royal College of Surgeons in Ireland. Again and again attempts have been made by a certain section of the Irish M.P.'s to damage the reputation of the Queen's Colleges in Ireland. The last attempt has not fared any better than its predecessors. In the House of Commons recently a question was asked as to whether the Professor of Anatomy in the Queen's College, Cork, had introduced a rule whereby more than one student was engaged in dissecting each part, and further, whether this professor was increasing his income by £100 a year out of the dissection fees, which was not included in the return of class fees. Of course no such rule was made, but occasionally, as is the custom in other medical schools, when the demand for parts is greater than the supply, it was found necessary to resort to it. Lastly, the fees for dissection are

not class fees, and no portion is retained by the professor for his own use.

Mr. Thomas Grainger has obtained the Coulter Exhibition at a recent examination held at the Belfast Royal Hospital, and the gold medal offered for competition to the students attending the Belfast Hospital for Sick Children.

Dublin, May 6th, 1884.

THE ROYAL COLLEGE OF SURGEONS.

AT an ordinary meeting of the Council, held on Thursday last, the resignation of Sir Erasmus Wilson was accepted with an expression of regret, and of thanks for his great liberality to the College.

A report of the Court of Examiners was adopted, to the effect that attendance on clinical lectures on surgery shall no longer be required from candidates rejected at the second membership examination.

A report was also presented on Mr. Quain's proposal to place busts of the past curators in the Museum. It was decided that the College could not incur any expenses for such a purpose.

With respect to the letter written by Mr. Tweedy (see THE LANCET of April 12th, p. 685), calling the attention of the Council to the 7th section of the Charter of 15 Vic., in reference to certain members of the Council who, he alleged, had ceased from the *bonâ-fide* practice of the profession of a surgeon, and had, by the provisions of this section, therefore ceased to be members of the Council, the President and Vice-Presidents reported that, as one of the gentlemen referred to (Sir Erasmus Wilson) had, since the receipt of the letter, resigned his seat in the Council, and as the other gentleman (Mr. Holden) will retire by rotation next July, they had not thought it necessary to make inquiries whether these gentlemen are or are not in the *bonâ-fide* practice of the profession of a surgeon, and they recommended that no action should be taken under the said section.

The annual election for Members of Council was fixed for Thursday, July 3rd.

The Council then took into consideration the recommendations and suggestions proposed at the general meeting of Fellows and Members held on March 24th last (see THE LANCET, March 29th, pp. 583 and 584). On the first and second motions of Mr. Paul Swain, that the Fellows and Members should have a larger share in the management of the College, and that no alteration in the constitution or relations of the College shall be effected without the consent of the Fellows and Members convened to discuss such alteration, the Council resolved that it was not advisable to take any action. The third of Mr. Swain's motions, that there should be an annual meeting of the Fellows and Members, at which the annual report of the Council should be presented, received, and adopted, was accepted, with the omission of the words "received and adopted." On Mr. Swain's fourth motion there was a prolonged discussion. Mr. Heath moved, and Mr. Cadge seconded, "That the question of election of the President from among the existing Members of Council by a majority of the Fellows be referred to the Committee on Charters and Bye-laws to consider the same, and report thereon to the Council." To this Mr. Hulke moved, and Dr. Humphry seconded, an amendment, "That, in the opinion of the Council, the election of the President should, as at present, be vested in the Council." This amendment was finally carried by a majority of thirteen to five. Mr. Heath's motion was therefore lost. The names of the voters on the amendment were taken, and were as follows:—In the majority: Sir J. Paget, Dr. Humphry, Sir Spencer Wells, Messrs. Cooper Forster, Savory, Lund, Wood, Power, Bryant, Hulke, Croft, and Sydney Jones, and Sir W. Mac Cormac. In the minority were Messrs. Erichsen, Holmes, and Cadge, Sir Joseph Lister, and Mr. Christopher Heath. Mr. Thomas Smith did not vote, and Mr. Holden, Sir Erasmus Wilson, and Mr. Hutchinson were absent.

No action was needed on Mr. Swain's fifth motion, that the charters should be altered to give effect to the resolutions proposed by him, inasmuch as the only suggestion accepted by the Council is already provided for by the bye-laws. No action was taken on Mr. Hickman's proposal that a charter should be obtained to enable the College to combine with the Royal College of Physicians, in order to form one college of medicine and surgery, to examine for degrees in those branches.

A letter was received from Dr. Joseph Rogers and Mr. Wickham Barnes on behalf of the Poor-law Medical Officers' Association, pointing out the hardships under which the officers labour with regard to superannuation. This letter was referred to the President and Vice-Presidents to consider and report thereon.

It was resolved to discontinue the publication of the "pass and pluck" list. Sir Spencer Wells' motion, of which he had given notice—namely, "That all confirmed resolutions of the Council be considered as in force until they have been formally rescinded, and that any existing resolutions which are not binding on the Council be rescinded"—was postponed.

Mr. Frederick Treves received the Jacksonian prize for his essay on "Obstruction of the Intestines."

MEDICAL NOTES IN PARLIAMENT.

The Lunacy Laws.

IN the House of Lords on Monday, the Earl of Milltown raised an interesting debate on the Lunacy Laws, which drew from the Lord Chancellor a promise that next session the Government would introduce a consolidating and amending Bill.

Sanitary Questions.

On Friday, in the House of Commons, Mr. G. Russell stated to Mr. A. McArthur that the Town Council of Leicester had complained of a serious nuisance to that town, caused by an adjoining rural district having no drainage. The Local Government Board communicated three times with the rural sanitary authority, but had as yet received no reply.—Sir C. Dilke, replying to Mr. Firth, said he was aware of the recent statement at the vestry of Clerkenwell that there were houses of the poor in the parish which were a disgrace to civilisation. He held the same view from personal observation. The vestry had declined to accept various recommendations of the Sanitary Committee. The attention of the Royal Commission on Dwellings of the Poor had been called to this parish, and the chairman of the Sanitary Committee was recently examined before the Commission.

Shop Labour.

On Monday there was laid upon the table a copy of an order by the Home Secretary, granting special exception as regards the period of employment to the drapers of Manchester and Salford.

Cork Medical School.

In reply to a further series of questions by Mr. O'Brien, Mr. Trevelyan stated that the professor of anatomy at Queen's College, Cork, had made no rule that two students should be simultaneously engaged in dissecting each part of a subject. That was only done under extreme necessity. All the fees went to the support of the school, and not to the professor. These matters would be within the scope of the Royal Commission on Irish collegiate institutions.

Homerton Small-pox Hospital.

Sir Charles Dilke stated to Lord G. Hamilton that the managers of this hospital were inquiring into the statement made by the Hackney medical officer of health that the re-opening of the hospital had led to the spread of small-pox in the district. The Local Government Board were satisfied that the managers were taking every precaution to prevent this. They were, in fact, making special efforts, by largely reducing the number of patients in the hospital, and by clearing adjacent properties which they had purchased with a view to clearing a free space around the building. The Diseases Prevention Act of last session, which was only intended to apply to an outbreak of cholera, took away no protection from the public with regard to epidemic diseases.

The Army Medical Department.

In Committee of Supply, Mr. Dawnay started a discussion on the management of the Army Medical Service in the Egyptian campaign. Whilst giving praise to the executive officers at the front, whose courageous labours had, he thought, been sufficiently recognised, he blamed the administration, as showing a lack of initiative and efficiency. Dr. Farquharson defended the department, and Col. Stanley

said he thought that it came out of the inquiry by the Morley Committee with flying colours. Dr. Lyons observed that the charges which were made eighteen months ago had fallen to the ground. Lord Hartington replied to Mr. Dawnay, and virtually repeated his speech of last year as to the generally satisfactory manner in which the medical service was conducted under great difficulties.

School Pressure.

On Tuesday, Lord A. Percy gave notice of a question as to the case of a boy named Wiles, at Shoreditch, who was reported to have been made insane by school pressure, and to have been beaten on the head with a ruler by a pupil teacher.

Patent Medicines.

On Thursday, Mr. Mundella informed Mr. Warton that the Sale of Poisons Bill, which would deal with the sale of patent medicines, would be ready in a few days, and would be immediately introduced in the House of Lords.

The Irish University Commission.

Mr. Trevelyan stated to Mr. McCarthy the names of the Commissioners appointed by the Lord Lieutenant to inquire into the present state of the Royal University and Queen's Colleges in Ireland. One of the five gentlemen appointed is Surgeon-General Marston, head of the Sanitary and Statistical Branch of the Army Medical Department.

Obituary.

DR. ANDREW WHYTE BARCLAY.

IN the early hours of Monday, April 28th, at the comparatively early age of sixty-six, passed away from us Dr. Andrew Whyte Barclay, treasurer of the Royal College of Physicians and consulting physician to St. George's Hospital. The son of a naval officer of Nelson's time, Dr. Barclay was born in the year 1817 at Dysart, in Fifeshire. He was educated at the High School at Edinburgh, and in the year 1834 commenced the study of medicine in that university. During his career in the Scotch capital he greatly distinguished himself, and finally graduated as a M.D. in the year 1839. He then continued his studies in Berlin with a view of profiting by the teaching there and of obtaining a thorough knowledge of the German language. Subsequently he extended his travels, and in company with two of his brothers visited Italy and France. At the commencement of his career as a medical student it was his intention to devote himself to surgery, and he entered himself on June 17th, 1836, at the Westminster Hospital as a pupil of Mr. Guthrie. It would appear, however, that surgery was in a measure not in accordance with his tastes, for in 1843 he entered at Caius College, Cambridge, with a view of taking the medical degree of that university. At Cambridge his career was, if possible, more distinguished than at Edinburgh, for he obtained the Mickleburgh, Persee, and Tancred Scholarships. In 1847 he took the M.B. degree at Cambridge, and shortly after completing his studies there he placed his name on the books of St. George's Hospital. He was then appointed medical registrar to the hospital, and in that capacity he devoted himself entirely to medicine. His reports of the cases in the wards of the hospital during his period of office are among the most valuable of the hospital records, while the system of indexing diseases which he elaborated during the time he was registrar is in daily use at the present time. In the year 1851 he was elected a Fellow of the Royal College of Physicians, and in the following year he graduated as M.D. of Cambridge. Five years later he was elected assistant-physician at St. George's Hospital; and on April 19th, 1862, on the resignation of Dr. Bence Jones, he was appointed full physician, which office he held until his retirement in accordance with the laws of the hospital in 1882. He was then appointed by the weekly board one of the consulting physicians.

During the period of his connexion with the Medical School as assistant-physician and physician, Dr. Barclay held two important lectureships—viz., those on materia medica and that on the principles and practice of physic. To the preparation of these lectures he devoted much time and labour, and although they were not interspersed with the racy anecdote and flashing wit so attractive to a youthful audience, they were full of sound and useful information, which the more thoughtful student delights to mark, learn, and inwardly digest. For many years treasurer to the Medical School at St. George's, Dr. Barclay was brought more immediately into contact with his pupils, and in this position his deep sense of justice and his kind consideration of their difficulties secured to him the esteem and regard of all under his charge. As physician to the hospital, his work was conscientiously and faithfully performed. Few men, indeed, showed to greater advantage when placed before a case in which the diagnosis was obscure.

Dr. Barclay was not a voluminous writer, but what he did write bears evidence of deep thought and accurate observation. His "Contributions to the Statistics of Valvular Diseases of the Heart in Rheumatism and Albuminuria," published in the thirty-first and thirty-fifth volumes of the Transactions of the Royal Medical and Chirurgical Society, were valuable papers on an important subject in times when theories were many and facts were few. In 1857 he published the work with which his name is especially associated—viz., "Medical Diagnosis," the third edition of which was issued in 1870. This work was the outcome of his labours as medical registrar at St. George's. Perhaps the best criticism on it is that of one who worked under him and is well competent to pronounce judgment on its merits. Dr. Sturges, in his introduction to the "Study of Clinical Medicine," p. 3, describes it as "a very careful discussion of the weight to be attached to the phenomena of disease under the different circumstances under which they arise, and is valuable both for the actual information it contains and for the philosophical spirit which pervades it." In 1860 two articles appeared from Dr. Barclay's pen in Holmes's "System of Surgery"—viz., on Delirium Tremens and on Croup and Diphtheria.

Of late years Dr. Barclay's attention was chiefly directed to sanitary subjects, his appointment as medical officer of health to Chelsea affording him ample opportunity of study. On April 29th the vestry of this parish, in expressing their condolence with his family, declared their appreciation of his professional attainments and of the valuable services he had rendered to the parish, adding that Chelsea would find his loss irreparable. Dr. Barclay's Harveian Oration at the College of Physicians in 1881 was an elaborate and carefully executed work, which fully maintained the dignity of the College. In the same year he was elected president of the Medical and Chirurgical Society, and under his sway the Society enjoyed a session of singular prosperity. In the proceedings of the College of Physicians few of its Fellows took more interest than the subject of the present memoir. In all its more important work Dr. Barclay was a moving spirit. His speeches at the Comitia were those of a man of sound judgment, and as such were always received with respect and attention. Dr. Barclay's capacity for the transaction of business was recently recognised by his college, and he was with one accord elected as its treasurer. By his death it has been deprived of a most valuable and efficient officer.

Modest and retiring almost to a fault, Dr. Barclay failed perhaps in obtaining that success in practice to which his high abilities fully entitled him. But it was in private life that his good qualities were chiefly manifested. At the head of his own table, or as president of a medical society, none could surpass him in geniality and hospitality. Thus he endeared himself to his friends and his *confrères*, and it may be truly said of him that those who knew him best loved him most. He had, so far as is known, been more or less anxious for some time as to the state of his circulation, the immediate cause of death being cardiac failure consequent upon symptoms of intestinal obstruction.

PROFESSOR GROSS.

THE illness of Professor Samuel D. Gross, of Philadelphia, which we announced last week, has, we regret to learn, proved fatal, and this distinguished surgeon passed away on the 6th inst. Already our American cousins can claim to have had many very eminent surgeons, but none has yet held a more distinguished position than Dr. Gross. He was possessed of great natural advantages; the great age to which he has lived in the enjoyment of all his faculties testi-

fies both to the excellence of his constitution and to the care he took of his health; his singularly handsome features are not likely ever to be forgotten by any who had the privilege of knowing him, and it was only in quite recent years that his tall, upright frame showed any trace of bowing under the weight of years. He frequently visited England and has many attached friends in the profession here. The last time he was among us was in 1880, when the honorary degree of LL.D. was conferred upon him by the University of Cambridge, at the time of the meeting of the British Medical Association in that town.

Dr. Gross graduated in the University of Pennsylvania in the year 1828, and at once settled in practice in Philadelphia. In 1856 he was appointed Professor of Surgery at the Jefferson Medical College, and continued to fill that post until two or three years ago. In addition to the labours attending hospital work and a large private practice, Dr. Gross was always busy with literary work. He wrote a "System of Surgery," which has long been the standard work on that subject for American students and practitioners, and within the last two years he, with the help of his son, saw a new and greatly revised edition through the press. He was also the author of works on the "Nature and Treatment of Wounds of the Intestines," "Foreign Bodies in the Air Passages," "Elements of Pathological Anatomy," and a "Practical Treatise on the Diseases and Injuries of the Urinary Bladder, Prostate Gland, and Urethra." He also wrote memoirs on Mott and Dunglison and on John Hunter and his pupils, and a history of American medical literature from 1776 to 1876. In addition to all this labour, he was the founder, and for many years the editor, of the *North American Medico-Chirurgical Review*. In all these ways Dr. Gross has been a very prominent figure in the surgical world in America, and his death leaves a very painful gap. He was a wise, skilful, and enlightened surgeon, a firm friend, and an upright man in all his relations, and many on this side of the Atlantic will regret that they can no longer number him among their friends.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following candidates have passed the Primary Examination for the Licence of the College:—

C. E. Adams, P. T. Adams, E. Atkins, R. A. Baillie, W. A. H. Barrett, E. A. Barton, G. T. Bates, A. Berrill, J. Blachford, C. S. Bontein, W. G. Brett, H. W. Brighouse, L. D. Brown, R. Burnett, H. T. Bury, G. Byrne, A. Caddy, H. L. Cade, R. T. Cann, T. H. Chittenden, J. R. Collyer, W. B. Colquhoun, I. R. Cory, J. H. Crouch, C. Dickinson, A. Duckworth, C. C. Ellis, A. R. F. Evershed, A. H. Fowler, J. B. Fowler, H. Fox, J. M. France, E. C. Freeman, J. H. Garrett, F. N. Gaudin, E. O. Gilkes, N. J. Goodchild, C. A. Goullet, J. S. Grose, W. Growse, H. S. Hall, W. Hall, L. Hamel-Smith, T. R. A. Harney, C. Haynes, R. L. Hildyard, A. Hillaby, W. T. Hodge, Y. M. J. Humphreys, G. H. Hunter, C. H. James, E. C. Johnston, H. E. Jones, C. E. Kempe, M. P. Ladell, C. G. Lermitte, F. W. D. Long, E. Loveday, J. B. McIlroy, T. Martland, G. E. Miles, C. D. Morris, G. W. Mullis, T. O'Connell, F. A. T. O'Meara, C. J. Parson, G. A. Pedley, J. M. Pickthall, A. J. Pickthorn, H. G. Plimmer, L. W. Pockett, J. Ponsonby, F. H. Pott, F. R. H. Potts, L. Powne, H. J. Pulling, B. T. Read, R. J. Reece, A. W. Riddell, J. W. Rigby, J. A. Rigge, G. E. Roach, G. E. Roberts, O. W. Roberts, J. I. Sankey, A. D. Scanlan, L. Selway, H. A. Smith, H. C. Smith, J. T. Smith, H. J. Smyth, W. J. Staddon, A. W. T. Steer, P. R. Stevens, G. E. Stewart, E. Swindells, R. Swyer, O. L. Theobalds, S. W. Thompson, E. A. O. Travers, A. W. Waller, J. A. Ward, S. E. Ward, E. P. Watkins, J. A. West, J. H. White, D. Williams, R. R. Williams, E. H. Young.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having passed the required examination for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 1st inst.:—

Dean, Francis, L.S.A., The Hyde.
Edwards, Charles Reginald, Antigua, West Indies.
Stace, Arthur Frank, L.S.A., Ledbury-road.
Sumpter, W. J. Ernely, L.S.A., Cley-next-the-Sea.
Tuckett, Walter Reginald, L.S.A., Bath.

Of the 233 candidates examined during the past fortnight 105 passed to the satisfaction of the Court and obtained their diplomas; 53 passed in Surgery, and when qualified in Medicine will be admitted Members; the remaining 75 failed to reach the required standard, and were referred to their further professional studies. Twenty-eight candidates who passed in Surgery at previous examinations, having subsequently obtained a degree or licence in Medicine recognised by the College, were also admitted Members.

The following gentlemen passed the Primary Examination in Anatomy and Physiology at meetings of the Board of Examiners on Monday, Tuesday, and Wednesday last:—

C. H. Melville, E. Roberton, A. R. Aldridge, Kenneth M. Scott, Caleb Terrey, David D. Black, David Hume, Edmund W. Clarke, Ernest T. Roberts, Trevor J. Pritchard, Ernest B. Turner, John R. Hill, T. H. Griffith, E. G. Kingdon, F. W. Collinson, A. E. Nevins, E. T. Pritchard, R. W. Smeddle, F. G. Clemow, F. T. King, and J. Warnock, Edinburgh; William Caldwell, Belfast; John E. Stott and F. Wilson, Liverpool; John Exley and G. A. Hawkins-Ambler, Leeds; Edward L. Burd, Cambridge; J. N. Lewis, University College; W. Race, Newcastle-on-Tyne; C. T. Hudson, Bristol; H. H. Marshall, Dublin and Edinburgh; William V. Morgan, University of Aberdeen; George M. Fox and W. Downing, Birmingham; Francis W. Clarke, Middlesex Hospital; W. H. Turton, C. C. Teacher, A. Wood, J. G. Glover, and J. W. Smith, Edinburgh; C. H. Wild, Liverpool; A. M. Gledden; St. Bartholomew's Hospital; E. Posnett, Leeds; W. Routh, St. George's Hospital; H. S. Fremlin, Westminster Hospital; H. J. Lankester, St. Thomas's Hospital.

[In the list published last week of gentlemen who passed for the Membership on the 26th ult., for "Chevers, James Trelawney," read "Cheves, James Trelawny."]

UNIVERSITY OF CAMBRIDGE.—At a congregation on the 1st inst., the degree of Bachelor of Medicine was conferred on the following gentleman:—

Griffith, Herbert Tyrrell, Trinity.

APOTHECARIES' HALL.—The following gentlemen passed the examination in the Science and Practice of Medicine, and received certificates to practise, on May 1st:—

Ackland, Charles Kingsley, Bideford, N. Devon.
Des Vœux, Harold Antoine, Sussex Villas, Kensington.
Hodgson, Gerald George, Montpellier-road, Brighton.
Penny, Francis, Coombe, Crewkerne.
Phillips, Ernest Willmer, Lansdowne-place, Brighton.

The following gentlemen also on the same day passed the Primary Professional Examination:—

Charles Howard Jackman, London Hospital; Leonard Roberts, St. Mary's Hospital.

UNIVERSITY COLLEGE, LONDON.—The distribution of prizes in the Faculty of Medicine will take place on Wednesday, May 21st, at 3 P.M., when the Earl of Kimberley will preside.

MRS. GLADSTONE, in the presence of a large assembly on the 5th inst., opened as a playground for the children in the neighbourhood of Southwark a part of the site of the old Horsemonger-lane Gaol.

ROYAL SOCIETY.—Amongst the fifteen gentlemen recommended by the Council for election to the Fellowship are the following:—Professors J. G. Allman, Isaac Bayley Balfour, J. G. McKendrick, C. S. Roy, and Dr. A. Ransome.

MR. DAVID HOOPER, F.C.S., of Birmingham, has been appointed by the Secretary of State for India Analytical Chemist and Quinologist to the Nilgiri Government Cinchona Plantations in the Madras Presidency.

MEATH HOSPITAL, DUBLIN.—The following have been awarded prizes at the termination of the winter session:—Senior Surgical: B. J. Acheson and E. Newell, equal. Junior Surgical: R. Pennefather, 1st; G. Gray, 2nd. Medical: S. Hickson, 1st; J. M. Day, 2nd.

THE WRANGLE POISONING CASE.—The woman Mary Leffley, charged with poisoning her husband by white arsenic, was found guilty on the 7th inst., and sentenced to death. An account of the case will be found in THE LANCET of February 23rd.

ROYAL INSTITUTION OF GREAT BRITAIN.—At the annual meeting held on Thursday, May 1st, the following were unanimously elected as officers for the ensuing year:—President: the Duke of Northumberland, D.C.L., LL.D. Treasurer: George Busk, Esq., F.R.S. Secretary: Sir William Bowman, Bart., LL.D., F.R.S.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.—The quarterly meeting of this Association was held at Bethlem Hospital on Tuesday, May 6th, Dr. Orange, President, in the chair. A letter was read from Dr. Manley, the president elect for the ensuing year, announcing his inability, through ill-health, to fill the office to which he was elected at the last annual meeting. A resolution of regret and condolence at this having been duly passed, the president stated that, acting under the Association's rule providing for such emergency, the Council had exercised the duty imposed upon them by electing Dr. Rayner to act as president during the coming year. Papers were read by Dr. Hayes Newington on "Unverified Prognosis," and by Dr. Bonville Fox on "Exaltation

in Chronic Alcoholism"; and Dr. Mercier introduced resolutions in favour of the transference of lunatics of foreign nationality to their own countries.

DAIRY FARMING.—A conference on the needs of dairy farming to meet the requirements of the future will be held in Gloucester on May 22nd to 24th, under the auspices of the "Milk Committee" of the Gloucestershire Chamber of Agriculture and the Sanitary and Economic Association, Limited.

BEQUESTS.—By the will of the late Mr. William Foster, of Queensbury and Hornby Castle, the following bequests are made:—Bradford Infirmary, £1000 to the endowment account and £500 to the building account; Bradford Fever Hospital, £750; Bradford Eye and Ear Hospital, £250; Bradford Children's Hospital, £500; and Halifax Infirmary, £1000.

ANOTHER EXHIBITION.—On June 16th, at Humphrey's Hall, Knightsbridge, will be opened an exhibition devoted to the display of articles and wares connected closely or remotely with medicine, surgery, pharmacy, &c. Gratuitous admission will be afforded to the public from 10 A.M. to 3 P.M., and the money raised by the charge of a shilling after that hour will be divided among six charities, connected with the professions and trades represented, to be selected by the exhibitors.

HOSPITAL FOR DISEASES OF THE CHEST.—On the 6th inst. the Earl of Shaftesbury laid the foundation-stone of a new building in connexion with this institution. At present the hospital contains twenty-six beds, and the new building will provide accommodation for seventy-five in-patients. The estimated cost of the extension is £11,000, and of this sum £6000 are already in hand or promised, and the committee appeal for additional subscriptions of £5000 to complete the building, and about £2500 more for fitting up and furnishing the hospital.

ST. MARY'S HOSPITAL.—The annual festival of this charity was held on the 7th inst., under the presidency of Lord Carlingford. The chairman said the institution was in a fairly prosperous condition, and had maintained its annual subscriptions and kept up 200 beds; yet had it not been for legacies it would have commenced but badly this year. After dinner subscriptions to the amount of £2400 were announced. An amateur dramatic entertainment in aid of the funds of the hospital will be given in the new wing of the hospital on Wednesday, May 14th, Thursday, May 15th, and Saturday, May 17th, 1884.

DEVONSHIRE HOSPITAL AND BUXTON BATH CHARITY.—The annual meeting of the subscribers to this institution was held at the hospital on the 3rd inst., when it was stated that from May 1st, 1883, to April 30th, 1884, 2318 in-patients were admitted, and of these 2024 were discharged as improved, 121 were no better when discharged, and 142 remained on the books. Three deaths, all referable to disease of the heart, occurred during the year. The receipts and expenditure continued to increase almost in relative proportions to the increasing number of patients. The extension of the hospital has necessitated the sale of investments to the amount of £12,000, the gift of £24,000 in this behalf from the Cotton Districts Convalescent Fund having proved inadequate. It is hoped, however, that by the generosity of the public this deficiency may be restored.

UNIVERSITY OF LONDON.—The following gentlemen were, at the meeting of the Senate held on the 1st inst., elected Examiners for 1884–85:—Chemistry: Prof. J. Emerson Reynolds, M.D., F.R.S.; Prof. T. E. Thorpe, Ph.D., F.R.S. Botany and Vegetable Physiology: Prof. Bayley Balfour, M.D., C.M., D.Sc.; Sydney H. Vines, D.Sc., M.A. Comparative Anatomy and Zoology: Professor E. Ray Lankester, M.A., F.R.S.; Professor Alexander Macalister, M.D., M.A., F.R.S. Practice of Medicine: W. H. Broadbent, M.D.; W. Miller Ord, M.D. Surgery: Sir William Mac Cormac, M.Ch., M.A.; Prof. John Wood, F.R.S. Anatomy: Prof. D. J. Cunningham, M.D., C.M., F.R.S.E.; H. Greenway House, M.S., M.B. Physiology: Prof. Arthur Gamgee, M.D., F.R.S.; Prof. Gerald F. Yeo, M.D. Obstetric Medicine: J. M. Duncan, M.D., LL.D., F.R.S.; John Williams, M.D. Materia Medica and Pharmaceutical Chemistry: T. Lauder Brunton, M.D., C.M., D.Sc., F.R.S.; Prof. F. T. Roberts, M.D., B.Sc. Forensic Medicine: Augustus J. Pepper, M.S., M.B.; Prof. George Vivian Poore, M.D., B.S.

PROPOSED TURKISH BATHS AT RYDE.—The report of the committee appointed last March to make inquiries respecting a site, cost, &c., of Turkish baths for Ryde was presented at a meeting specially convened to receive it on the 24th ult. It was stated that a suitable site can be obtained on lease for a term of 999 years, at a very moderate rental; and the committee recommend that on this ground, in addition to Turkish baths proper, there should also be established hot and cold sea and fresh water baths, the remaining space to be occupied by covered and open tennis courts, &c. Several speakers having testified to the need of such an establishment in the town, the report was adopted, and a provisional committee elected to further the scheme.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

ALLEN, Mr. ALFRED H., has been reappointed Public Analyst for the Borough of Sheffield.

BINDLEY, VICTOR N., M.R.C.S., L.S.A.Lond., House-Surgeon at the Queen Adelaide Dispensary, has been appointed Assistant-Surgeon to Her Majesty's Convict Prison, Dartmoor.

BREWSTER, WILLIAM, M.R.C.S. & L.S.A.Lond., has been appointed Resident Medical Officer to the York Dispensary, vice J. O. Hordin, M.B., resigned.

CASSELS, CHAS. E., F.C.S., has been appointed Public Analyst for the Borough of Chipping Wycombe.

CHALMERS, GEORGE, M.B., C.M.Ed., has been appointed Medical Officer for the Newbottle District of the Houghton-le-Spring Union.

GREEN, CHARLES, M.D., M.R.C.S., has been appointed Medical Officer to the Eastern Relief District, Gateshead-on-Tyne, vice Geo. Douglass, M.D., resigned.

HILL, ALFRED BOSTOCK, M.D.Giess., L.R.C.P.Ed., L.S.A.Lond., has been reappointed Public Analyst for the County of Warwick.

JAMIESON, W. ALLAN, M.D., C.M., F.R.C.P.Ed., has been appointed Extra Physician for Diseases of the Skin, Royal Infirmary, Edinburgh.

MORRISON, J. T. J., B.A., M.B., B.S.Cantab., F.R.C.S.Eng., has been appointed Resident Surgical Officer to the General Hospital, Birmingham.

MUDGE, THOMAS, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Western District of the Redruth Union.

NISBET, JOHN TAUSE, M.B., C.M.Ed., has been appointed Resident Physician to the Royal Hospital for Sick Children, Edinburgh, vice Smith, whose term of office has expired.

SMITH, JAMES MURRAY, M.B., C.M.Aberd., has been appointed Medical Officer for the First District of the Romford Union.

SPICER, FREDERICK, M.B., M.R.C.S., has been appointed a Resident Medical Officer to the Royal Free Hospital, Gray's-inn-road, vice F. Norvill, M.B., M.R.C.S., resigned.

STEWART, THOS. GRAINGER, M.D., F.R.C.P.Ed., has been appointed one of the Consulting Physicians to the Royal Hospital for Sick Children, Edinburgh.

TATHAM, C. J. WILLMER, M.R.C.S. & L.S.A.Lond., has been appointed Assistant Medical Officer to the Warneford Asylum, Oxford.

WRIGHT, CHAS. J., M.R.C.S., has been appointed Assistant-Surgeon to the Hospital for Women and Children, Leeds.

Births, Marriages, and Deaths.

BIRTHS.

CABLE.—On the 30th ult., at Royal Hill, Greenwich, the wife of G. H. Cable, M.R.C.S., of a son

CAMPBELL.—On the 3rd inst., at Sheffield-gardens, Campden-hill, W., the wife of Brigade-Surgeon A. D. Campbell, of a son.

DARLEY-HARTLEY.—On the 30th March, at East London, Cape Colony, the wife of W. Darley-Hartley, M.R.C.S., L.R.C.P., Editor of the *South African Medical Journal*, of a son.

OWEN.—On the 27th ult., at Nicosia, Cyprus, the wife of Owen Owen, M.R.C.S., Army Medical Department, of a son.

SWALES.—On the 18th ult., at Alexandra-terrace, Marine-town, Sheerness-on-Sea, the wife of Peter Swales, M.R.C.S. & L.S.A.Lond., of a son.

WHITE.—On the 4th inst., at Malmesbury, Wilts, the wife of Edward Arthur White, M.D., of a son.

MARRIAGE.

HICKEY—BEGGS.—On the 3rd inst., at St. Saviour's, Chorlton-on-Medlock, Manchester, by the Rev. W. F. Birch, M.A., Rector, Thomas Canning Hickey, M.B., L.R.C.S.Ed., Staff-Surgeon, Royal Navy, to Elizabeth Grace (Lizzie) Beggs, eldest daughter of David Beggs, of Manchester.

DEATHS.

ARNOLD.—On the 2nd inst., at Closebrooks, Antibes, France, John Arnold, M.D., of Port of Spain.

BIBBY.—On the 25th ult., at Green-street, Grosvenor-square, Samuel Hale Bibby, M.R.C.S.

BISSILL.—On the 9th ult., at sea, on board the ship *Parramatta*, Austin Charles Bissill, M.R.C.S., youngest son of J. H. Bissill, of Sleaford, Lincolnshire, aged 25.

CARNEGIE.—On the 4th inst., at Chesterfield, John Carnegie, M.A., M.D., in his 51st year.

GALE.—On the 5th inst., Henry Stanley Gale, M.B.Lond., of Hyde-road, Manchester, aged 47.

RICHARDSON.—On the 2nd inst., at Castle-hill, near Ealing, James Richardson, L.R.C.S.Eng., late of Duke-street, Manchester-square, in his 68th year.

WILLIAMS.—On the 27th ult., at his residence, Southsea, Henry Francis Williams, M.D., Deputy Surgeon-General H.M. Indian Medical Service (retired).

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

BOOKS ETC. RECEIVED.

CASSELL & Co., London.

Materia Medica and Therapeutics. By J. Mitchell Bruce, M.D.Lond. pp. 547.

CHURCHILL, J. & A., London.

The Cinchona Barks, Pharmacognostically Considered. By F. A. Flückiger, Ph.D. Translated, with Additional Notes, by F. B. Power, Ph.D. pp. 101. With Plates.

LAUPP'SCHEN, H., Tübingen.

Mittheilungen aus der Chirurgischen Klinik zu Tübingen. Herausgegeben von Paul Bruns. H. 1 u. 2.

LONGMANS, GREEN, & Co., London.

Transactions of the National Association for the Promotion of Social Science. Huddersfield Meeting, 1883.

Nineteen Centuries of Drink in England. By R. Valpy French, D.C.L., LL.D. pp. 398.

MACMILLAN & Co., London.

A Treatise on Chemistry. By H. E. Roscoe, F.R.S., and C. Schorlemmer, F.R.S. Vol. III.: The Chemistry of the Hydrocarbons and their Derivatives, or Organic Chemistry. Part 2. pp. 655.

A Text-book of Pathological Anatomy and Pathogenesis. By Prof. Ernst Zeigler. Translated and Edited by Donald Macalister, M.A., M.B. Part 2: Special Pathological Anatomy. pp. 371. Illustrated.

Reflections in Palestine, 1883. By Charles George Gordon. pp. 124.

NELSON & SONS, London.

Thirty Years' Experience of a Medical Officer in the English Convict Service. By John Campbell, M.D., Staff-Surgeon, R.N. pp. 139.

PUTNAM'S SONS, New York. J. & A. CHURCHILL, London.

Eczema and its Management. By L. Duncan Bulkley, M.D. Second Edition. pp. 344.

SAMPSON LOW, MARSTON, & Co., London.

Diabetes Mellitus. By H. J. Philpot, L.R.C.P. &c. pp. 112.

SMITH, ELDER, & Co., London.

An Index of Surgery. By C. B. Keetley, F.R.C.S. Second Edition. pp. 494.

A Treatise on Surgery, its Principles and Practice. By T. Holmes, M.A.Cantab. Fourth Edition. pp. 905. With 418 Illustrations.

The Elements of Physiological and Pathological Chemistry. By T. Cranstoun Charles, M.D. pp. 600. With 38 Illustrations.

STANFORD, EDWARD, London.

The Family Guide to Brussels. By J. R. Scott. Second Edition. pp. 192.

Viri Illustres. (Pentland, Edinburgh.)—Utility and Morality of Vivisection; by G. Gore, LL.D., F.R.S. (Kolckmann, London.)—Studies from the Biological Laboratory of Johns Hopkins University, Vol. III.—Scientific Apparatus and Chemicals, also Art Examples and Models, approved by the Science Department. (Laurie, Paternoster-row.)—Die Technik der Massage; von Dr. Albert Reibmayr. (Toeplitz and Deuticke, Wien.)—A Dozen Papers relating to Disease Prevention; by Cornelius B. Fox, M.D.—The Indo-Chinese Opium Trade; by J. Spencer Hill, B.A.Camb. (Frowde, Amen-corner.)—Longman's Magazine, May.—Good Words, Sunday Magazine, May.—Leisure Hour, Boy's Own Paper, Girl's Own Paper, Sunday at Home, for May.—Specificity and Evolution in Disease; by W. J. Collins, M.D. (Lewis.)—Physical Exercise from a Physician's Point of View; by W. J. Naismith, M.D.—Scottish Review, April.—Le Choléra en Egypte en 1883; par le Dr. D. Iconomopoulos du Caire.—Cassell's Popular Gardening, Part 1.—The Cure and Prevention of Spinal Curvature; by A. Leffler-Arnim.—Hygrometricity and the Spread of Specific Contagia; by F. W. East, M.D.Durh.—Insanity and Nervous Disorders peculiar to Women in some of their Medical and Medico-legal Aspects; by T. More Madden, M.D. Second Edition. (Fannin & Co.)—The Ghesl Lunatic Colony; by Dr. G. A. Tucker, Ph.D. (Cornish Brothers.)—O Corte do Mangue: por Pedro S. Caldeira.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, May 8th, 1884.

Date.		Barometer reduced to Sea Level and 32° F.	Direction of Wind	Dry Bulb.	Wet Bulb.	Solar Radiation in Vacuo.	Max. Temp. Shade.	Min. Temp.	Rain fall.	Remarks at 8.30 A.M.
May	2	29·79	N.W.	52	46	84	57	48	·06	Cloudy
,,	3	29·44	W.	55	52	99	58	51	·03	Cloudy
,,	4	29·30	S.W.	55	49	101	59	41	·38	Cloudy
,,	5	29·49	W.	50	46	103	59	40	·04	Cloudy
,,	6	29·74	N.W.	49	45	95	61	39	·14	Cloudy
,,	7	30·10	W.	51	46	93	58	40	·12	Hazy
,,	8	30·03	W.	56	51	90	61	47	·05	Cloudy

Medical Diary for the ensuing Week.

Monday, May 12.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

Tuesday, May 13.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 P.M., and Thursdays at 2 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION.—3 P.M. Professor Gamgee: Nerve and Muscle.

ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.—8 P.M. Mr. E. H. Man: The Ethnology of the Andaman Islands.—Professor Flower: Additional Observations on the Osteology of the Natives of the Andaman Islands.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Mr. F. J. Gant: A Pelvic and Parietal Tumour of the Abdomen; removal by operation, and recovery.—Dr. George Harley,: An Easy and Safe Method of Sounding for Impacted Gall-stones.—Dr. G. E. Herman: An Average or "Composite" Temperature Chart of Small-pox.

Wednesday, May 14.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays, at 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1½ P.M.—Skin Department: 9.30 A.M., on Tuesdays and Fridays.

ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.

GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.—Skin Department: 1.45 P.M., and on Saturday at 9.15 A.M.

EPIDEMIOLOGICAL SOCIETY OF LONDON.—7.30 P.M. Council Meeting.—8 P.M. Dr. Joseph Ewart: The Colonisation of the Sub-Himalayahs and Neilgherries, with Remarks on the Management of European Children in India.

ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Dr. P. Herbert Carpenter: The Minute Organisation of the Nervous System of Crinoids.

Thursday, May 15.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.

ROYAL INSTITUTION.—3 P.M. Professor Dewar: On Flame, &c.

HARVEIAN SOCIETY.—8.30 P.M. Mr. Edmund Owen: A case of Hypospadias (sex of the child originally mistaken).—Dr. Cheadle will re-open the discussion on Scarlet Fever.

Friday, May 16.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—8 P.M. Professor Odling: The Dissolved Oxygen of Water.

Saturday, May 17.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Professor Bonney: Microscopical Geology.

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

THE EDUCATION OF SCHOOL CHILDREN.

DR. JOHN DAVY of Halifax, in a communication to us on the above subject, after referring to the arguments for and against the present system of education adopted in Board Schools, and remarking that this system has a tendency to develop the powers of the brain at the expense of the other organs of the body, makes the following suggestions:—"The State has fixed a standard of mental excellence which must be attained before a child is legally fit for work. Ought not a gauge of physical excellence to be required also? Could not such a gauge be easily found? Could not a standard of height, weight, chest girth, vital capacity, or any other test of physical education, one or all, be attached to each of the present standards, so that each child should be required to pass these gauges to be promoted into the higher standards, as now they are required to pass in the several subjects of the standards? If such a system were adopted, what would be the probable results? The motive for putting pressure on intelligent but delicate scholars would be removed. Managers and teachers, ambitious to excel, eager for their grants, would leave no stone unturned to secure for their pupils good food, warm clothing, healthy schools, suitable gymnastic exercises, regular drill, and plenty of outdoor exercise, in order to bring them up to the physical standards, and when their power and influence failed private benevolence would step in. Weakly, delicate, deformed, imbecile, phthisical children, unable to pass their standards, would speedily come under medical care, or become the objects of philanthropic enterprise. Parental pride, often callous enough to the refinements of mental culture, hypersensitive to physical deficiencies, would recoil with mortification at rejection from physical disability, whilst generally the subject of the scientific rearing of children would receive an impetus and a consideration, not perhaps without benefit to the race, and its prosperity."

Mr. A. E. Snook is referred to a general notice at the head of this column.

M.R.C.S.—The College of Physicians does not grant the degree of M.D.

M.B., C.M. should apply at the office of the Crown Agents for the Colonies, Downing-street.

"ACADEMIÆ EDINENSI SALUTEM."

To the Editor of THE LANCET.

SIR,—I have to thank "Virgilianus" for his genial and scholarly letter. May I explain, *à propos* his suggestions, that Queen Mary was not made captive (*capta*), but made a widow by the explosion in which Darnley and the Kirk o' Field were blown up; that *vidua* is quite allowable for *viduata;* and that in indirect questions the best editors now omit the note of interrogation. I would demur to "Pallas et honoret" for the one reason that the final syllable of Pallas (the goddess) is short, even if the line as thus amended were "more strictly metrical" and "more easily translated" than the line as published by you. "Nunc ægris rite mederi" I accept as an improvement, though "Virgilianus" knows very well that the archaic infinitive "mederier" is quite Virgilian. "Arcturus" (the star) has no place in my verses. What I meant to convey was this: "Arthur's Seat (the hill near Edinburgh) will sooner fall, and the lazy Forth sooner revisit its mountain-springs, than the name and renown of the Academia Edinensis shall fade." I am, Sir, yours truly,

Rome, May 5th, 1884. YOUR CORRESPONDENT.

Virgilianus and *Cantab.* are referred to the note of the writer of the poem (*supra*).

W. D.—We see no objection to the double title.

MR. SPENCER AND THE AYLESBURY GUARDIANS.

IT is satisfactory to learn from the *Bucks Herald* of May 3rd that the discourtesy with which Mr. Charles Spencer, parochial medical officer, was treated at a meeting of the Aylesbury Board of Guardians was censured by the chairman, with the concurrence of several members, on the next suitable occasion. Under the circumstances, of course, a further apology need not be insisted on.

Dr. D. W. Jones.—Thorowgood's small Guide, or Garrod's Essentials, edited by Baxter.

Professor Hamilton (Aberdeen).—The abstracts will be acceptable.

THE USE OF SOPORIFICS.

To the Editor of THE LANCET.

SIR,—In commenting on the recent deaths resulting from the employment of chloral and bromide for sleeplessness, you remarked somewhat severely on its use by practitioners for this purpose, and hinted it betrayed either a want of knowledge of the physiological condition of the organs in fault or dislike to take sufficient trouble to investigate the true cause. In a case I have under my care at present, neither time nor thought has been spared either by myself or the consultant who has seen the case with me. The patient, a lady fifty years of age, is in perfect health so far as she knows, or we can discover, yet for the last few years she has suffered, with short exceptional periods, from inability to sleep. She is abstemious in her habits both as regards alcohol and food, has no mind trouble, and the secretions of the various organs are healthfully performed; yet night after night she cannot obtain sleep without the assistance of a little chloral and bromide (ten grains of the former and fifteen of the latter), which quantity has never been exceeded, but she is anxious to do without it if possible.

I am, Sir, yours truly,

May 3rd, 1884. A YOUNG PRACTITIONER.

AN ANCIENT TREE.

AT a recent meeting of the Berlin Medical Society photographs were shown by Professor Virchow of a gigantic plane tree in the island of Cos, under the shade of which Hippocrates is said by tradition to have held medical consultations. The tree stands in the market-place of the town of Cos, on the east side of the island, and the branches, which spread over nearly the whole of the market-place, are supported by marble pillars.

E. Hall.—The case of our correspondent is a sad one; but we see no ground for our interference.

Layman.—Medical advice may be advisable.

FEEDING-CUP OF IMPROVED CONSTRUCTION.

To the Editor of THE LANCET.

SIR,—In cases where suction is impracticable, whether caused congenitally or from wound accidentally and otherwise inflicted, nourishment may be introduced by the nostril. I would suggest using a feeding-cup having an entire cover in lieu of a half cover, the upper limb of the handle being tubular. When the spout is introduced into the nostril, by removing the thumb from the aperture of the tubular limb, fluid food passing, the amount, by pressure of the thumb on the aperture, is limited, and successive portions may be administered without the removal of the cup, as heretofore.

I am, Sir, yours truly,

Totnes, May 6th, 1884. HUGH T. S. BEVERIDGE, M.D.

Nemo.—A "consultant" may be defined as a physician or surgeon who is prepared to attend the call of a general practitioner, but does not himself engage in general practice. There is no necessary connexion between consulting practice and the holding of a hospital appointment.

"FEES FOR MEDICAL EVIDENCE IN COURTS OF LAW."

To the Editor of THE LANCET.

SIR,—Your remarks on the above subject, together with Mr. Smith's letter, show that strange rules govern payments to medical witnesses. I have recently experienced the same shabby treatment as Mr. Smith. The case being summarily disposed of, I was told (with expressions of regret) that the magistrates had no power to grant me a fee. I understand that had the case been dismissed or sent to the Assizes the county would have paid my expenses—truly, an anomalous condition of things. I say nothing of the hardship of making the complainant pay all cost attending a police prosecution of the defendant for indecently assaulting his children; for such was the nature of the case in question.

I am, Sir, yours truly,

May 6th, 1884. G. H. K.

A SUGGESTION.

To the Editor of THE LANCET.

SIR,—Now that so many of our hospitals are appealing for funds, do you think the following suggestion feasible? That any person might give or leave money to endow a single bed, which should be named after her or him. The amount received might be made known, and if after some years there was a surplus on one bed it might go to the general fund of the hospital, or be a set-off to a deficiency on another endowed bed. I am, Sir, yours truly,

South Norwood, May 1st, 1884. GEO. VARLEY

THE ALLOTMENT OF SPACE AT THE HEALTH EXHIBITION.

WE have received letters from two well-known firms complaining of the refusal of the Committee of the Exhibition to allot them space for the display of articles manufactured by them. One of these firms wished to exhibit seven patented inventions, one of them being an entirely new apparatus for the purpose of drawing off the vitiated air from infectious disease hospitals and destroying the disease germs, so as to render innocuous the presence of these institutions in crowded neighbourhoods. Although it is within the knowledge of this firm that one exhibitor was allotted twice as much space as he applied for, the Exhibition Committee, on the ground of insufficient space, offered for the exhibition of these seven inventions an allotment of 13 ft. by 4½ ft., a space which, being totally inadequate, the firm in question declined. The second firm, whose application for a grant of space was unconditionally refused, very pertinently ask how the undertaking can be styled an International Health Exhibition when its promoters, after soliciting contributions of recent inventions appertaining to the public health and resources to be applied in cases of emergency, refuse such contributions when tendered. This latter firm exhibited a specimen of their production at the General German Hygienic Exhibition held at Berlin in 1883, when they were awarded a gold medal.

Williton.—1. In regard to gentlemen who undertake the office of locum tenens, it is almost an invariable rule for the principal to pay second-class fare from London and back, in addition to the weekly fees (£3 3*s.* a week and upwards), and board and lodging.—2. There is no recognised rule as to the travelling expenses of assistants. It is generally a matter of arrangement between the parties; but in most cases the principal pays the fare one way.—3. Agents charge a fee of 10*s.* 6*d.* to principals for engaging a locum tenens. For assistants, as a rule, they charge no fee to principals, the entire fee, 21*s.*, being payable by the assistant.

MEDICAL ETIQUETTE.

To the Editor of THE LANCET.

SIR,—On the afternoon of April 23rd I was called by Mrs. ——, a midwife, to a case that she was attending. When I arrived I found that the child was born; the cord was broken, and the placenta retained. I removed the placenta, adjusted the binder, and saw that the patient was made as comfortable as possible. There had been considerable hæmorrhage, and the patient was rather exhausted. I advised the midwife to wash out the uterus daily for the next few days, and said I would send some medicine. As I was leaving the house the midwife told me that, owing to her age (she is about eighty), she did not feel competent to go on with the case, and distinctly asked me if I would take charge of the patient. I said I would take the case for a fee, and eventually the midwife agreed to pay me 15*s.* I went home and sent some medicine, and intended to call again in the evening. About an hour after I got home I received the following message:—"Mrs. —— has sent me to say that her own doctor (Dr. Wight) has now called in, and he is going to attend the person; that no medicine is required, so I have brought back the bottle, and Mrs. —— has sent 2*s.* 6*d.* for your fee." This I refused to accept, but sent back word that I was willing to continue to attend the case, as agreed, for 15*s.* On April 26th I called on the midwife respecting my fee. She then denied that she had sent for me, or had ever agreed to hand the case over to me. I threatened to write to the papers and put both the names of the parties, when she told me that it was not Dr. Wight, but his assistant, who had taken charge of the case.

I shall be much obliged to you if you will kindly answer the following questions:—1. Has not Dr. Wight's assistant, and by implication Dr. Wight, committed a great breach of professional etiquette in stepping in and taking the case out of my hands after I had actually done the only part of the work that required professional skill and involved responsibility? 2. Was it not adding insult to injury to send back my medicine with 2*s.* 6*d.*? 3. The midwife having agreed to pay me 15*s.* for what I did at the time and for what I proposed to do in the future, am I not entitled to my fee, notwithstanding that I was not allowed to continue my treatment of this case? 4. Would it be advisable for me to summon the midwife in the county court? 5. In the event of my being called in under similar circumstances, only in Dr. Wight's place instead of my own, would not the proper thing for me to do be to say that as another doctor had already seen, treated, and prescribed for the case I could not interfere, except in consultation with or by permission of that gentleman?—I remain, Sir, yours truly,

EUSTACE J. DE GRUYTHER, L.R.C.P., L.R.C.S. Edin.

Jackson-road, Holloway, N., May 3rd, 1884.

*** WE may safely defer answers to the above questions till Dr. Wight or his assistant has an opportunity of giving his version of the facts.—ED. L.

THE DISCRETION OF ASSISTANTS.

IT is usual for qualified assistants to be allowed to use their own discretion in prescribing for patients, on the understanding, of course, that all serious cases are duly reported to the principal.

Apple.—We do not know that the Registrar of Friendly Societies has any power to interfere. The security is in the fact that an unqualified practitioner would be unable to recover for his services.

IMPROVED CORSETS.

SOME years ago we had the opportunity of noticing favourably a corset and abdominal pad introduced by Cavé, and we have recently had our attention called to a new corset produced by the same maker, under the name of "Cavé's Patent Student's Corset," an appliance designed expressly to remedy the evils produced by excessive study. It is calculated to prevent contraction of the chest, to keep the shoulder-blades in their natural position, and to prevent stooping habits generally. The corset is provided (for a support) with a steel plate shaped to fit over the shoulder-blades, and to the top of each side of the back near the shoulders is a strap or band to pass over the shoulders from back to front and over the arms, to be again secured to the back or sides of the corset by means of a buckle. The idea is good, and the ill effects of study on woman's physique would no doubt in many cases be obviated by the use of this new corset. We have also had recently brought under our notice a corset, styled "The Unique," manufactured by E. Clark of Old Bond-street. The sides of this corset are made of elastic material, by the use of which undue pressure is obviated and the need of wires and springs is done away with. As with the previous corset, the idea is excellent, but is not new, elastic corsets having been in use at least twenty years ago. Mr. Clark's appliance is, however, an advance on anything of this nature that we have yet seen, and will be found beneficial by all those who engage in pursuits in which extensive movements of the thorax are essential.

Mr. C. N. Wharton.—The action of the gentleman named is no doubt discourteous; but we fear our correspondent has no redress.

Dr. Mackie is thanked. The telegram, however, arrived too late to be of service.

RECIPROCITY IN MEDICAL QUALIFICATION FOR PRACTICE.

To the Editor of THE LANCET.

SIR,—We foreigners hear and read much of the liberality of England; but possibly some further confirmation is necessary of the enclosed newspaper paragraph before believing it. Is it really true that students have only to pass an examination in midwifery in order to receive a diploma enabling them to practise medicine in England and the Colonies? And, if so, whether foreigners are granted diplomas to practise upon the same terms? Perhaps you or your readers will kindly give some information upon the subject to a SWISS STUDENT.

*** Our correspondent encloses a paragraph from the *Schweizerische Grenzpost* (Basel) of April to the effect that the English Ambassador has been applied to for information respecting the proposed reciprocity in rights of medical practice between foreign countries and England contemplated by the Bill now before Parliament, and to ascertain whether it is a fact that in this country practitioners can be registered upon a sole qualification (in midwifery, medicine, or surgery). To this it may be replied that the essence of the Bill is to abolish such an anomaly, and to provide that no one shall be allowed to practise who is not qualified in all the branches. Since the proposed Act will admit to the Register persons holding approved foreign diplomas we may confidently anticipate that Switzerland, which profits so much from the patronage of English physicians, will also remove all obstacles to practise there in the way of duly qualified English practitioners.—ED. L.

THE WILSON FUND.

To the Editor of THE LANCET.

SIR,—I shall feel obliged if you will kindly insert the following additional subscriptions to the Wilson Fund in your next issue, and allow me to convey my thanks to the subscribers.

I am, Sir, yours truly,

The Chantry, Saxmundham, May 6th, 1884. H. A. COLLINS.

Sir James Paget, Bart. ..	£2	2	0	Dr. T. Colas, Inspector-General, R.N.	£1	0	0
Dr. J. Andrew	2	2	0	Mrs. Webber, Aldeburgh.	1	0	0
Mr. C. Higgens	2	2	0	Dr. Burchell	0	10	0
Mr. J. C. Worthington, Lowestoft	2	2	0	Dr. Beverley, Norwich ..	0	10	0
Dr. Pye-Smith	1	1	0	H. A. L.	0	5	0
Dr. Crowfoot, Beccles ..	1	1	0				

PRINCIPALS AND ASSISTANTS.

An Old Assistant writes:—"After coming a distance of 270 miles, I have found it almost an impossibility to obtain suitable accommodation, and such as there is I find most expensive, and would considerably reduce the income I thought proper to accept. Principals and assistants are too often at variance in this respect. The failure to admit such circumstances on the part of principals amounts almost to absolute cruelty in cases where the comfort of wives and children are at stake. I would respectfully warn all assistants who contemplate a permanency to endeavour, if at all practicable, to ascertain beforehand what is the real state of affairs, and, further, to allow a fair time to elapse before they sign an agreement which they can never recall."

Grandpa had better communicate directly with the gentleman named.

A COUNTRY HOLIDAY FOR CHILDREN IN LARGE TOWNS.

THE Manchester and Salford Sanitary Association, in imitation of London, are trying to organise a fund for sending delicate children for three weeks into the country, to be boarded with cottagers at five shillings a week. A guinea will provide three weeks' holiday for a child. We could not conceive a more beneficent proposal, or one more worthy of development either in London or the larger provincial towns.

Dr. Alexander (Halifax) is thanked.

Mr. S. F. Smith.—The inquest may not have been necessary. At the same time, we must say that the wording of the certificate of death was somewhat involved. It is so important, where there is the slightest doubt as to the exact cause of death, that an inquiry should be made, that we would even go the length of doing a little wrong to do a great good. We are making the most strenuous endeavours to bring about a reform in medico-legal practice generally, and in "crowners' quests" in particular.

L.K.Q.C.P. has not enclosed his card.

QUANTITATIVE ESTIMATION OF ALBUMEN.

To the Editor of THE LANCET.

SIR,—The approximate amount of pure albumen contained in albuminous urine can be easily calculated. White of egg contains ⅛ by weight of pure albumen (Pavy, "Food"). If one minim of white of egg be diluted with water up to 100 minims, this, on adding nitric acid and boiling, would indicate, on settlement in a graduated tube for thirty-six hours, 12½ minims of albumen as ordinarily seen in a test-tube (experiment)—that is, a specimen containing $\frac{1}{100}$ of white of egg, or $\frac{1}{800}$ by weight of pure albumen, indicates, on boiling and settlement in the usual way, ⅛ albumen by volume. To estimate the weight of albumen passed in the twenty-four hours by a patient with albuminuria the total quantity of urine passed in that time must be collected. A specimen of this is boiled in a test-tube, the albumen well broken up by pouring from one tube to another, and then allowed to settle in a graduated tube for thirty-six hours. We will suppose such a specimen to indicate ⅛ apparently of albumen, and the total amount of urine passed in the twenty-four hours to be 50 fl. oz. The weight of pure albumen in that total amount would be $\frac{1}{800} \times 50$ oz. $= \frac{1}{16}$ oz. = 43·75 grs. The translation from fluid to avoirdupois measure is best effected as above, in ounces, since 1 fl. oz. of water weighs 1 oz. avoirdupois. The specific gravity of the albuminous solution, supposing the salts and other matters absent, would differ very little from that of water, and may be ignored. Blood contains about ⅛ by weight of solids, chiefly albuminoids, and its specific gravity is only 1·052 (Quain's "Anatomy"), and probably pure white of egg has about the same specific gravity. So a specimen containing only $\frac{1}{100}$ of white of egg ($\frac{1}{800}$ pure albumen) would approximate very closely to water in specific gravity, and in urines more highly charged with albumen the calculations would scarcely be invalidated.

I am, Sir, yours truly,

St. Leonards-on-Sea, April 29th, 1884. ARTHUR FRANKLIN.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Pratt, Cardiff; Professor Charles, Cork; Mr. Knowsley Thornton, London; Professor Hamilton, Aberdeen; Messrs. Cassell and Co., London; Dr. Alexander, Halifax; Mr. Bradford, London; Mr. Kneebone, Bedford; Dr. Redwood, Rhymney; Mr. Johnson, Basingstoke; Mr. Fyffe, Southport; Mr. Fletcher, Broughton; Mons. S. Bernard, Bordeaux; Messrs. Crossley and Co., London; Mr. Orrock, London; Mr. Welpton, Richmond; Mr. Moore, Folkestone; Mr. Cornish, Manchester; Mr. Walker, Aylesbury; Mr. Brown, New Basford; Messrs. Fannin and Co., Dublin; Mr. Reynolds, Castle Donington; Dr. Gwynne, Cannock; Mr. Browne, London; Mr. Booker, London; Messrs. Smith and Son, Manchester; Mr. Richardson, Leamington; Mr. Menzies, Glasgow; Mr. King, Southampton; Mr. Day, Bowness; Mr. Smith, Birmingham; Mr. Ker; Mr. Robertson, Sunderland; Dr. Gilder, London; Mr. Saunders, London; Dr. Lucas, Poplar; Messrs. Livingstone and Co., Edinburgh; Mr. Manby, East Rudham; Messrs. Lee and Martin, Birmingham; Mr. J. R. S. Vine, London; Dr. Milner Moore, Coventry; Messrs. Bing and Son, Canterbury; Messrs. Wood and Co., New York; Mr. Arthur Neve, Kashmir; Mr. Holmes, Egham; Mr. Berthier, Paris; Mr. Jones, Salisbury; Mr. Vitall, London; Mr. Tyler, London; Mr. Greig Smith, Clifton; Mr. James West, London; Mr. Wharton, Glasgow; Mr. Henry Smith, London; Dr. Andrew, London; Dr. Roche, Kingstown; Mr. J. B. Cox; Mr. Colcott Fox, London; Dr. Dobson, Netley; Mr. Pink, London; Dr. W. Ewart, Brighton; Dr. Hector Cameron, Glasgow; Mr. Collins, Saxmundham; Mr. Julius Cæsar, London; Dr. Percival Hunt, Aldershot; Dr. Beveridge, Totnes; Mr. Madigan, Kilrush; Dr. Jacobson, London; Dr. W. D. Jones, Ruthin; Mr. F. Vacher, Birkenhead; Messrs. Becker and Co., London; Dr. Illingworth, Clayton-le-Moors; Dr. Archibald Macdonald, Liverpool; Mr. Frank Marsh, Stafford; Surgeon-Major Myers; Mr. Harry Campbell; Dr. R. Park, Crosshill; Messrs. Booth and Fox, Cork; Mons. E. Decroix, Paris; Dr. Dobbin, Banbridge; Dr. C. J. B. Williams, Cannes; Dr. W. Nelson, Panama; Mr. F. S. Smith, London; Mr. Hickman, London; Mr. Woodland, London; Messrs. Nash, Stephens, and Co.; Mr. Raffety, London; Messrs. Hassard and Tyrrell; Mr. L. F. Cogan, Northampton; Mr. E. Clark, London; Dr. Suckling, Birmingham; Dr. Garstang, Blackburn; Dr. Julius Pollock, London; Mr. F. E. Cane, Leeds; Mr. Luijks; Mr. C. A. Thimm, London; Mr. L. L. Cohen, London; Mr. De Gruyther, London; Mr. Thomas Jones, Calcutta; Mr. Mark Judge, London; Mr. R. N. Wolfenden, London; Dr. Percy Boulton, London; An Old Member of the Society; Williton; Ignoramus; Midwife; A Young Practitioner; W. D.; Virgilianus; Apple; G. H. K.; A. K.; Inquirens; A., Leicester; A. J. F.; Nemo; Cantab.; K., Manchester; A. H. B.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Burnett; Messrs. Sharpe and Co., Liverpool; Mr. Croke; Mr. Golder, Reading; Mr. White, Barnsbury; Mr. Trubsham; Mr. Codling, Ancaster; Mr. Hall, Truro; Dr. Barret, Old Aberdeen; Mr. Gant, Birmingham; Dr. Harding; Mr. Brown, New Basford; Dr. Nurwan, Swingford; Mr. Van Praagh, London; Mr. Stanley, Newport; Mr. Tweedle, West Hartlepool; Miss Landale, Bath; Mr. May, Tunstall; Mr. Hamilton, Dromahir; Dr. Thurston, Tunbridge Wells; Mr. Thomson, Luton; Mr. Woolley, Heanor; Mr. Jennings, Lewisham; Mrs. Hunter, Kensington; Mr. Barcombe, Lincoln; Mrs. Bedingfield; Mr. Hern, Darlington; Mr. Macdonald, Edinburgh; Mr. Huthwaite, Walthamstow; Mr. Davies; Mr. Eberle, Thirsk; Mr. Allsop, Teignmouth; Dr. Broome, Clifton; Mr. Macmillan, Blackheath; Mr. Bulger, Pontymyster; Messrs. Adams and Co., Birmingham; Mr. Myers, London; Zoola; Trobly Qualified; H. G. B.; Thymol, East Dulwich; A. C., Mistley; Sigma; J. F. M. B., Leicester; L. R.; O. H. G.; Jacobus; Physician, Leicester; Alpha; M.D., Camden Town; T. B.; B. H. R.; A. B., Cardiff; M.B., M.R.C.S.; Medicus, Linkinhorne; Edina; Medicus, West Bromwich; A. G. H., Notting-hill; A. Z., Maidstone; Medicus, Newcastle-on-Tyne; Practitioner; L.R.C.P., Sheffield; W. H. C., Southsea; X., Sheffield; Medicus, London; R. S.; F. H.; B. Y. Z.;

Sussex Daily News, Natal Mercantile Advertiser, Pump Court, Western Morning News, Winsford and Middlewich Guardian, Sandbach and Middlewich Advertiser, Millom Advertiser, Brighton and Sussex Daily Post, Melbourne World, Herald of Health, Peabody Record, Panama Star, &c., have been received.

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